



**MANUFACTURED HOUSING CONSENSUS COMMITTEE
AGENDA
April 28-30, 2010
Marriott Tulsa Southern Hills
Tulsa, OK**

WEDNESDAY THE 28TH

- 8:00 am Convene Meeting.....Elizabeth Cocke, Designated Federal Official
8:05 am Call to OrderChair
Welcome
Roll call
Introductions
New Members/Guests
Administrative Announcements
8:30 Guest presenter.....Harry Indig, DOE
9:30 am Recess for Subcommittee/Task Force meetingsChair

THURSDAY THE 29TH

- 8:00 am Call to OrderChair
8:05 am Public comments.....Open
8:30 am HUD Report.....Elizabeth Cocke, Secretary's Representative
9:00 am Minutes ApprovalMHCC
May 7, 2009 Conference Call - Minutes (**Agenda Attachment A, p. 3**)Motion
July 9, 2009 Conference Call Minutes (**Agenda Attachment B, p. 26**).....Motion
July 28-30, 2009 Arlington, VA Minutes (**Agenda Attachment C, p. 32**).....Motion
- August 7, 2009 Conference Call Minutes (included in 7/28-7/30/09 minutes)
- August 20, 2009 Conference Call Minutes (included in 7/28-7/30/09 minutes)
- August 27, 2009 Conference Call Minutes (included in 7/28-30/09 minutes)
- September 1, 2009 Conference Call Minutes (included in 7/28-30/09 minutes)
March 23, 2010 Conference Call Minutes (**Agenda Attachment D, p. 55**).....Motion
9:15 am Call for Committee Status Reports (not action items).....Chair
TECHNICAL STRUCTURE & DESIGN
Wind Task Force
TECHNICAL SYSTEMS
Indoor Air/ ASHRAE Task Force
Energy Efficiency Task Force
Formaldehyde Task Force
GENERAL
Accessibility Task Force
10:00 am RecessBreak
10:15 am Recommendations to MHCC from SubcommitteesAction

TECHNICAL SYSTEMS SUBCOMMITTEE

Indoor Air/ASHRAE Task Force.....Lubliner
Energy Efficiency Task ForceLubliner

TECHNICAL STRUCTURE & DESIGN SUBCOMMITTEE

Wind Design CriteriaFarish

12:00 pm Lunch

1:00 pm Call to OrderChair
1:05 pm Recommendations to MHCC from SubcommitteesContinue
2:00 pm RecessBreak
2:20 pm ConveneChair
2:25 pm Proposals.....Secretary’s Representative and MHCC

HUD Proposals

Sprinklers (Agenda Attachment E, p. 63)
Vent/Exhaust Outlets(Agenda Attachment F, p. 68)
Entertainment Outlet Receptacles (Agenda Attachment G, p. 70)
Fireplace Venting/Crawl Space Ventilation (Agenda Attachment H, p. 72)
Proposed Amendment-Ground Anchor Assembly Testing Protocol
.....(Agenda Attachment I, p. 74)

Public Proposals

Venting System Terminations Log #69 (Agenda Attachment J, p. 96)
Tankless Water Heater Log #70 (Agenda Attachment K, p. 98)
Tankless Water Heater Log #71(Agenda Attachment L, p. 100)
Receptacle Outlets Log #72(Agenda Attachment M, p. 103)
Tie Down System Log # 66 (Agenda Attachment N, p. 108)

5:00 pm RecessChair

FRIDAY THE 30TH

8:00 am Call to OrderChair
8:05 am HUD ProposalsContinue
10:45 am Closing announcementsDFO
11:00 am AdjournChair

ATTACHMENT A
MINUTES
MAY 7, 2009 CONFERENCE CALL

Draft minutes
HUD Manufactured Housing Consensus Committee
Conference Call
May 7, 2009

1. Chairwoman Brenton called the meeting to order at 11:00 a.m. Mr. Solomon called the roll; a quorum was present. Mr. Solomon checked for guests. Mr. Matchneer introduced HUD staff on the call.

Mr. Matchneer noted that this call is to pick up where the April 7, 2009 left off. He reported that the updated list of reference standards was ready. Mr. Solomon noted that he had researched what reference standards were available and which were not. It was noted that two copies of the reference standards must be included in the documentation. Mr. Matchneer indicated that more research may be needed.

Ms. Brenton asked whether the Subcommittees should do the review. Mr. Farish agreed that the Technical Subcommittees should do the review. Mr. Matchneer noted that it is in everyone's best interest to use the most current standard but each must be checked. Mr. Lubliner noted that the NFPA 501 Committee had done a review. Mr. Ghorbani noted that the MHCC has a different charter than the NFPA 501 Committee. Mr. Solomon noted that he went through the 501 reference standards in his research and checked with the respective standard organization for the most current version and availability of older versions.

It was moved, seconded and carried that a discussion of the 3rd set of standards be added to the agenda.

Mr. Ghorbani asked why the bylaw discussion had been removed from the agenda. Mr. Matchneer noted that the bylaws and MHCC charter are being reviewed with the GSA and HUD ethics department. He indicated that it will take a while but, when done, it will be back on the MHCC agenda. He noted that the GSA is responsible for oversight of all Government Advisory Committees and it conducts an annual review of all committees. Mr. Ghorbani stated that the GSA review should have been conducted before putting the topic on the MHCC agenda. In addition, Mr. Ghorbani also questioned the role of the GSA rules and review of the MHCC as what GSA concludes does not matter and is not relevant to the MHCC. Mr. Matchneer concluded that the GSA role regarding procedures for all Federal Advisory Committees is a very important subject for the proper management and function of the MHCC.

It was moved, seconded and carried that the agenda be amended to include a discussion of the bylaws as agenda item 3 and a discussion of the 3rd set of standard revisions as item 5.

2. Mr. Roberts read a statement regarding his involvement with the Congressional roundtables. Mr. Roberts' statement is attached. There was no other public testimony.
3. Mr. Ghorbani stated that he agreed that the bylaw change should have been withdrawn by HUD because the proposal was based on Mr. Roberts' participation on the two Congressional roundtables. He stated that Mr. Roberts April 7, 2009 and May 7, 2009 statements should be made part of the record as attachments to the minutes.

Mr. Berger moved that Mr. Roberts' statements and any responses be forwarded to the Committee. Motion seconded and carried.

Mr. Berger moved that the Committee note its support for Mr. Roberts' participation in the Congressional roundtables as he had done nothing improper as he had indicated that he was acting as a private citizen and not as representing the MHCC. Mr. Berger also stated that the MHCC is an extension of Congress given that the creation of the MHCC was at the behest of Congress through passage of the MHIA of 2000. Mr. Weinert questioned whether the invitation to participate was based on Mr. Roberts' role on the MHCC, his position in the state of Oregon, or, as an expert on manufactured housing. He noted that all this could have been avoided if five minutes of a meeting or conference call had been devoted to the invitation. Mr. Berger noted that Mr. Roberts had been invited as an expert and, therefore, his participation was proper. Mr. Vogt agreed with Mr. Weinert. Mr. Farish stated that it is premature to approve the motion until all the documents have been reviewed by the Committee. Mr. Lubliner agreed. Mr. Stammer questioned why this was being brought up now as it happened three to five years ago. Mr. Ghorbani noted that it was the basis for the proposed bylaw change and the MHCC has to protect its role. A motion to table the action until the in-person meeting was passed.

4. Mr. Berger reported that the Carbon Monoxide Task Group had agreed to recommend that CO detectors be mandatory. There is a question as to whether all-electric homes should be exempted. He noted that the International Residential Code already requires CO detectors. The CPSC testified that from 2000 - 2004 there has been 166 deaths, 81 of which are attributed to heating devices. The estimated cost to the homebuyer for the CO detector would be about \$150. He noted that the NFPA does not recommend the combination CO and smoke detectors because the units have different life cycles. A question was raised as to whether consideration of the recommendation by the MHCC bypasses the Technical Systems

Subcommittee. Mr. Ghorbani requested that the Task Group minutes and report be posted on the website. Mr. Berger stated that he would send the report to the AO.

Mr. Vogt asked how many of the CPSC reported deaths were attributed to CO coming in from garages. Mr. Berger stated that number was not provided by the CPSC. Mr. Lubliner noted that in a Nebraska case a car had been left running in the garage and therefore all-electric homes should not be exempt.

Mr. Berger moved and seconded that CO detectors be required in all manufactured homes per NFPA 720 and UL 2034. Mr. Ziemann offered a friendly amendment that the Task Group put the requirement into regulatory language for consideration at the next meeting. Mr. Lubliner agreed. Mr. Ghorbani asked if there were any data on HUD code homes. Mr. Berger stated that it was not broken out in the CPSC data. Mr. Weinert noted that there is good data on smoke deaths; the data on CO deaths is not as robust. He suggested that the requirement be left to the AHJ for the first cycle to allow for feedback as the data presented do not rise to the same level of seriousness that other conditions have. Mr. Vogt noted that action should be considered before a legislative body steps in. There was a question as to whether there should be an explicit effective date or be left to the AHJ. Mr. Ziemann moved that HUD put the requirement into regulatory language for consideration by the MHCC at the next meeting. Mr. Berger withdrew his original motion. Ziemann motion seconded and carried. There was a question about replacement; Mr. Matchneer noted that HUD does not have jurisdiction beyond the original sale. Mr. Jewell noted that detectors are designed to be easily replaced.

5. Mr. Lubliner reviewed the background for the duct testing proposal. He noted that a Task Group had been convened and had worked through the proposed requirement. He noted that the MHCC had given informal support to the need for a requirement. Mr. Solomon noted that the subject was discussed at one of the meetings in 2006 but there was no recorded vote. Mr. Ghorbani asked if there was any interface with DOE initiatives. Mr. Matchneer indicated that he did not think DOE is considering the issue. Mr. Lubliner noted that issue is not only an energy conservation issue but also an indoor air quality issue. The latter may even be more important.

Mr. Ghorbani stated that if DOE is not addressing the issue the MHCC should. Mr. Farish doubted that DOE has discussed the issue. Mr. Weinert questioned why DOE has not discussed the issue. Mr. Lubliner indicated that DOE is focusing on U_o thermal efficiency standards. Mr. Lubliner expressed some frustration that after two years the issue has not been considered because a vote was forgotten to be recorded. Mr. Roberts stated that the MHCC had not voted on the issue. He recommended that Mr. Lubliner submit the proposal as a public comment. Mr. Ghorbani expressed a concern

about the effect on small manufacturers. Mr. Weinert stated that the MHCC has a responsibility to inform DOE of the need. Mr. Berger agreed that the issue should be addressed. Mr. Ghorbani noted that Congress recognized that DOE should liaise with HUD and MHCC. Mr. Matchneer indicated that there is no reason not to start now to address the issue.

Mr. Zieman moved that the requirement be adopted with the following amendments:

In paragraph 1) "5% of the floor area" be replaced with "0.05 cfm/sqft"; and, "positive or" be deleted; and,

a new paragraph be added:

3) Installed with all registers and crossover connections sealed. Floor sections of multi-floor homes shall be tested separately.

Motion, as amended, was moved, seconded and carried. The proposal is to be balloted by the MHCC

6. It was agreed that the 3rd set of standards should be returned to the respective Subcommittees for a final review. Mr. Inks asked when the MHCC had approved the 3rd set for submission to HUD. Mr. Solomon indicated that they were approved in 2006. Mr. Solomon indicated that the 3rd set are/will be posted on the website. Mr. Matchneer indicated that the changes are being put in rule format and are not ready for public review.

Mr. Matchneer reported that the 2nd set of standards were ready to be published at the end of the last administration, however, the new administration wanted to be fully briefed prior to publication.

7. Mr. Gorman reported that the Regulatory Enforcement Subcommittee will have a conference call on May 20, 2009 to review the draft PIA rule. It was noted that the MHCC only has until August 4, 2009 to respond to HUD. Mr. Matchneer indicated that it would most likely take more than one Subcommittee conference call to prepare a recommendation for the MHCC. Mr. Solomon suggested that two calls be set on consecutive days.

Mr. Matchneer reported that the Tulsa manufactured home show will be considered for the 2010 in-person meeting if the program gets direct funding. The show is in late April, early May. Mr. Berger moved that the 2010 in-person meeting be held in Tulsa at the manufactured home show. Motion seconded and carried. Mr. Solomon will obtain the exact dates from Mr. Gorman. It was suggested that the COSAA meeting be tied into the show. Mr. Matchneer indicated that it was considered for this year but the contract could not be done in time. Motion carried.

Mr. Lubliner briefly reported on the activity of the Indoor Air Task Group. He noted that there was a tie in with the discussion on energy efficiency. The Task Group had an excellent meeting with representatives from ASHRAE and NIST participating. The Task Group is reviewing ASHRAE 62-2. Mr. Weinert reported that he had not had time to convene the Formaldehyde Task Group.

Mr. Ghorbani requested that all members get notices of Task Group meetings. Mr. Solomon will check with Ms. Pereira.

8. The call concluded at 1:10 pm.

**HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
ATTENDANCE SHEET
TELECONFERENCE
Wednesday, May 7, 2009**

STATUS: M=MEMBER; NVM=NON VOTING MEMBER; AO= ADMINISTERING ORGANIZATION
SEC=SECRETARY

NAME	STATUS	ORGANIZATION	Attendance	
			Yes	No
Berger, Jack	M	Berger Reconstruction	X	
Braun, Karl	M	NAMH – MHOAA	X	
Brenton, Susan	M	MHCA	X	
Denese, Martin	M	GHCM-CTED		X
Desfosses, Theresa	M	ME Manufactured Homes		X
Farish, William	M	Fleetwood Homes	X	
Ghorbani, Danny	M	MHARR	X	
Gorman, Doug	M	Home – Mart, Inc.	X	
Inks, Jeffrey	M	MHI	X	
Jewell, Kevin	M	Consultant	X	
Lagano, William J.	M	Commonwealth Consulting		X
Lubliner, Michael	M	WAU Energy Program	X	
Luttich, Mark	M	NB SAA	X	
Matchneer, William III	HUD	NVM/DFO	X	
Nelson, Terry	M	MHOA OF IL		X
Sheahan, Timothy	M	GSMOL/MHOAA	X	
Solomon, Robert	AO	NFPA	X	
Stamer, William	M	Champion Homes	X	
Toner, Pat	AO/SEC	NFPA	X	
Vogt, Randy	M	State of MN, Dept. of Admin Building Codes	X	
Wade, Michael	M	Cavalier Home Builders, Inc.		X
Walter, Frank	M	Consultant	X	
Weinert, Richard	M	State of CA	X	
Zieman, Mike	M	RADCO	X	

**HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
TELECONFERENCE
Wednesday, May 7, 2008**

GUEST ATTENDANCE SHEET

NAME	ORGANIZATION	ATTENDANCE
Aguolu, Uju	HUD	X
Brolin, John	HUD	X
Brolin, John	HUD	X
Carpio, Daniel	HUD	X
Cocke, Liz	HUD	X
Colson, Kirstin-Ivey	HUD	X
Cornejo, Eleanor	HUD	X
Dickerson, Rhonda	HUD	X
Mendlen, Rick	HUD	X
Pethel, Lane	HUD	X
Podzius, Casey	HUD	X
Postiglione, Amanda	HUD	X
Race, Peter	HUD	X
Reder, Alan	NTA, Inc.	X
Roberts, Dana	Self	X
Tompos, Dave	NTA, Inc.	X
Wallace, Angelo	HUD	X
Weiss, Mark	MHARR	X
Weldy, John	CMH Manufacturing, Inc	X

April 15, 2009

Honorable Shaun Donovan
Secretary
U.S. Department of Housing and Urban Development
Room 10000
Washington, D.C. 22510

Re: Unethical Conduct and Slander by Bill Matchneer, Associate Deputy
Assistant Secretary for Regulatory Affairs and Manufactured Housing

Dear Mr. Secretary:

I am asking you to take the appropriate action and to set the record straight concerning my involvement with the Department of Housing and Urban Development's Manufactured Housing Consensus Committee (MHCC).

Associate Deputy Assistant Secretary for Regulatory Affairs and Manufactured Housing, Bill Matchneer, in communications dated March 26, 2009 and April 6, 2009 (see copies attached) has lied about my involvement with the MHCC and has accused me of "abusing" my position as an MHCC member and its first Chairman for more than five years.

These emails, sent to the members of the MHCC and disseminated widely throughout the manufactured housing industry, were entered into the public record during an MHCC conference call meeting on April 7, 2009, and are still being used by Mr. Matchneer to question and impugn my integrity and truthfulness.

Further, he has apparently used this fabrication of events in communications with the General Services Administration (GSA) and HUD ethics counsel, to accuse me of "impermissible lobbying by a Federal Advisory Committee member" and, because of this, implicitly threatens to abolish the MHCC (see April 6, 2009 email).

During the public comment period of the April 7, 2009 MHCC conference call, I entered into the public record my written testimony regarding these baseless accusations (see copy attached). In addition to factually stating the actions that I properly took in my personal capacity, with full disclosure to the MHCC, I asked for two actions:

1. An official retraction of all statements to the effect that I abused my position when I was Chairman of the MHC; and
2. An "official response by the Department to determine if the comments made by Bill Matchneer is a reflection of HUD's official position about how I acted in my role as Chairman of the MHCC and if this is a sign of the new way [that you as Secretary] will be treating volunteers who have spent their time and energy helping the Department."

However, in a subsequent April 8, 2009 email (see attached), Mr. Matchneer continues to question my truthfulness (even though he now admits his office received my letter dated May 2, 2004, as described in my written testimony, with attachments) by asking the members of the MHCC at that time if they received their copy of May 2, 2004 letter. Interestingly, almost all of

the members at that time remember receiving it and some still have copies (see attached response from one MHCC member).

Mr. Secretary, the MHCC is comprised of 3 distinct constituent groups (industry, consumers and general interest) of 7 members each. It takes two-thirds consensus to adopt an official position. Consequently, I have never represented MHCC approval or support for any of my statements until after official action has been taken. For Mr. Matchneer to represent otherwise, is an egregious misrepresentation.

For obvious reasons, I view this as a very serious event. I spent over 30 years in Oregon State government in executive and managerial positions and this is the first time I have ever been accused of lying about my role or involvement in public service. For Mr. Matchneer to make accusations against my character based on meetings that he did not attend, without speaking to me first about my actions at those meetings, or examining the public records of the MHCC beforehand was reckless at best. For him to wait until almost one year after I left the committee and five years after the first event to make these false accusations without even informing me is inexcusable and, in my view, an ethical violation in its own right.

I would have thought that the Department, if it had the slightest concern about my role as Chairman, and as a member of the MHCC, would have immediately advised me, or removed me from the MHCC since I served at the discretion of the Department and specifically the Secretary

Further, Mr. Matchneer's comments reflect negatively on the Manufactured Hoemowners Association of Oregon, of which I am a member, and which I represented on the MHCC during the last four years of my service.

I look forward to your timely and appropriate response to this matter -- one that sets the record straight and removes this false blemish that has been placed on my years of public service.

Sincerely,



Dana C. Roberts
Former Chairman of MHCC
3360 Basswood St. NW
Salem, Oregon 97304

cc: Hon. Barney Frank
Hon. Christopher Dodd
Hon. Richard Shelby
Hon. Spencer Bachus
Hon. Ron Wyden
Office of Government Ethics
MHCC

Forwarded Message:

Subj: **Background on Ethics Bylaw**
Date: 3/26/2009 9:46:23 A.M. Pacific Daylight Time
From: william.w.matchneer@hud.gov
To: mhcc@kgjewell.com, tpsheahan@cox.net, bill.fanish@fleetwood.com, wjlagano@aol.com, BStamer@championhomes.net, MHARRDG@AOL.COM, doug@homemart.us, fandrwalter@verizon.net, jdberger@comcast.net, JEFF@mfghome.org, mhcckarl@cs.com, mark.luttich@nebraska.gov, graceharbourchurch@yahoo.com, mwade@cavhomesinc.com, lublinerm@energy.wsu.edu, MikeZieman@aol.com, randy.vogt@state.mn.us, rweinert@hcd.ca.gov, suebrenton@aol.com, mhoai1@aol.com, theresa@statemanufacturedhomes.com
CC: jmcgovern@NFPA.org, Hpattoner@aol.com, rsolomon@NFPA.org, mhccaoffice@nfpa.org
Sent from the Internet (Details)

MHCC Members:

This email is offered as background on the ethics bylaw that is on the MHCC agenda for a vote on April 7. As you can see from this recent email message, MHARR believes that HUD is trying to silence the committee through this proposed ethics rule and its appointment of a member who is a strong consumer advocate. As a strong industry advocate, MHARR should appreciate the "proper balance" [604(a)(3)(E)] that such a member can bring to the committee process.

AS As for the ethics bylaw, it was developed by the General Services Administration (GSA) and HUD ethics counsel to prevent actions like those taken by the former MHCC Chairman in 2004 and 2005, when he appeared at roundtable meetings of House and Senate staff in Washington.

Speaking as Chairman of the MHCC, he presented grievances that were strikingly similar to those then held by industry. Neither of these appearances was authorized by the MHCC, nor did the Chairman make any attempt to disclose them to the MHCC.

AS Unlike the members of most Federal Advisory Committees, Congress decided not to treat MHCC members as temporary Federal employees [604(a)(3)(A)(iv)]. This exempted you from annual financial disclosure requirements and in turn exempted you from Federal ethics laws. GSA is the Committee Management Secretariat for the Federal Advisory Committee Act (FACA). When HUD reported these appearances to GSA, we were told that such unauthorized and undisclosed public statements by a committee member would normally have violated Federal ethics laws.

AS However, since these laws do not technically apply to MHCC members, GSA strongly recommended that HUD prepare a bylaw for the MHCC to make it clear that members may not make unauthorized public statements on the MHCC's behalf.

AS I trust that most members will accept this bylaw a simple pledge not to abuse your positions.

Thursday, March 26, 2009 America Online: DanaCRob

Bill Matchneer
Designated Federal Officer
Manufactured Housing Consensus Committee

From: DANNYGHORBANI@aol.com [mailto:DANNYGHORBANI@aol.com]
Sent: Tuesday, March 17, 2009 3:45 PM
To: undisclosed-recipients:
Subject: SUBJECTS AS LISTED BELOW

MARCH 17, 2009

TO: MHARR MANUFACTURERS
FROM: DANNY D. GHORBANI
RE: SUBJECTS AS LISTED BELOW

HUD AIMS TO SILENCE MHCC

In yet another attempt to erode and undermine the role and authority of the Manufactured Housing Consensus Committee (MHCC), HUD has proposed an amendment to the MHCC bylaws -- under the guise of "ethics" -- for the Committee to consider and vote on.

If adopted, this amendment will silence Committee members, stop the Committee's exchange of views and ideas with federal program stakeholders, and will drastically stifle and curtail the Committee's internal debates on the standards and regulations of the federal program.

MHARR is currently analyzing the legislative, regulatory and legal aspects of this strange HUD proposal and will follow-up accordingly.

CONSUMERS UNION TAKES POSITION ON FINANCIAL ISSUES -- REVIVES ACTIVITY ON MANUFACTURED HOUSING

Industry members might be interested in the following link, which goes to a letter submitted to the Administration by the Consumers Union (CU) regarding regulatory aspects of the financial crisis. As might be expected, based on prior manufactured housing industry experience with CU -- which participated in the National Commission on Manufactured Housing and opposed the industry on many aspects of the Manufactured Housing Improvement Act of 2000 as it was being developed -- that group supports more stringent and comprehensive regulation of the finance and mortgage industry, with no "gaps."

<http://www.defendyourdollars.org/pdf/Obama-financial-regulatory-restructuring.pdf>

Worried about job security? Check out the 5 safest jobs in a recession.

Forwarded Message:

Subj: **Fwd: Ethics Bylaw for Manufactured Housing Consensus Committee**
Date: 4/7/2009 5:59:21 A.M. Pacific Daylight Time
From: [REDACTED]
To: [REDACTED]

From: william.w.matchneer@hud.gov
To: mhcc@kgjewell.com, tpsheahan@cox.net, bill.farish@fleetwood.com, wjlagano@aol.com, BStamer@championhomes.net, MHARRDG@AOL.COM, doug@homemart.us, fandrwalter@verizon.net, jdberger@comcast.net, JEFF@mfghome.org, mhcckarlsr@cs.com, mark.luttich@nebraska.gov, graceharbourchurch@yahoo.com, mwade@cavhomesinc.com, lublinerm@energy.wsu.edu, MikeZieman@aol.com, randy.vogt@state.mn.us, rweinert@hcd.ca.gov, suebrenton@aol.com, mhoai1@aol.com, theresa@statemanufacturedhomes.com
CC: Elizabeth.A.Cocke@hud.gov, Rhonda.L.Dickerson@hud.gov, Leslie.M.Nichols@hud.gov, Stephanie.L.Mansfield@hud.gov, ronald.spraker@hud.gov, jmcgovern@NFPA.org, Hpattoner@aol.com, rsolomon@NFPA.org, mhccaoffice@nfpa.org
Sent: 4/6/2009 4:51:53 P.M. Eastern Daylight Time
Subj: **Ethics Bylaw for Manufactured Housing Consensus Committee**

MHCC Members:

As additional background, I am attaching the handout former Chairman Roberts distributed to the attendees at the Congressional roundtable meeting on April 20, 2004. This document was not presented to the MHCC or HUD prior to the meeting. Both the General Services Administration (GSA) and HUD ethics counsel have reviewed the document and both consider that, on its face, the distribution of this document by Chairman Roberts supports the conclusion that his appearance was an act of impermissible lobbying by a Federal Advisory Committee member.

Tuesday, April 07, 2009 America Online: DanaCRob

Under §7 (b) of The Federal Advisory Committee Act, GSA annually reviews "each advisory committee to determine—

- (1) whether such committee is carrying out its purpose;
- (2) whether, consistent with the provisions of applicable statutes, the responsibilities assigned to it should be revised;
- (3) whether it should be merged with other advisory committees; or
- (4) whether it should be abolished."

Upon the completion of the review, GSA makes "recommendations to the President and to either the agency head or the Congress with respect to action [it] believes should be taken."

Based on this incident and other difficulties HUD has reported, GSA currently reviewing the MHCC more closely than it has in previous years. The Office of Government Ethics (OGE) and HUD ethics counsel will be assisting. This may result in some recommended changes to the MHCC process.

We will keep the MHCC members advised.

Bill Matchneer

Designated Federal Official

Manufactured Housing Consensus Committee

—Original Message—

From: Matchneer, William W <william.w.matchneer@hud.gov>
 To: mhcc@kgjewell.com; tpsheahan@cox.net; bill.farish@fleetwood.com; wjlagano@aol.com; Bill Stamer <BStamer@championhomes.net>; MHARRDG@AOL.COM; doug@homemart.us; fandrwalter@verizon.net; jdberger@comcast.net; JEFF@mfghome.org; mhcckarlsr@cs.com; mark.luttich@nebraska.gov; graceharbourchurch@yahoo.com; mwade@cavhomesinc.com; lublinerm@energy.wsu.edu; MikeZieman@aol.com; randy.vogt@state.mn.us; rweinert@hcd.ca.gov; suebrenton@aol.com; mhoai1@aol.com; theresa@statemanufacturedhomes.com
 Cc: jmcgovem@NFPA.org; Hpattoner@aol.com; rsolomon@NFPA.org; mhccaooffice@nfpa.org
 Sent: Thu, 26 Mar 2009 12:44 pm
 Subject: Background on Ethics Bylaw

MHCC Members:

This email is offered as background on the ethics bylaw that is on the MHCC agenda for a vote on April 7. As you can see from this recent email message, MHARR believes that HUD is trying to silence the committee through this proposed ethics rule and its appointment of a member who is a

For the record my name is Dana Roberts former member of the MHCC.

I would like to start by thanking the 3 members of the MHCC who took the time to alert me to the lies Bill Matchneer has been spreading about my actions when I was Chairman of the MHCC.

I find it deplorable that Bill did not have the courage to discuss this issue with me and took it upon himself to spread lies about meetings he was excluded from since he was not high enough up in HUD's hierarchy to attend and accuses me of abusing my position when I was Chairman of the MHCC.

Obviously Bill Matchneer is not subject to the same ethical standards he would hold the MHCC to.

To clear the record concerning my involvement and comments during two round table meetings with House and Senate Staff in April 2004 and January 2006 I offer the following:

First I never represented that I was speaking on behalf of the MHCC:

- I made it very clear that I only represented my views and I was specifically not speaking as Chairman of the MHCC. I also made it clear I would not attend unless I was specifically requested to attend by committee staff as an expert on Manufactured Housing and not as Chairman of the MHCC. I have kept copies of each committee staff's request to attend the two meetings.
 - For the record I have been considered an expert on manufactured housing in the Northwest, and I have had the support of five state agencies and industry representative in those states. During my years in the manufactured housing program I have briefed many congressional staff on manufactured housing issues.
 - One of the primary co-sponsors of the 2000 Act was in fact then Representative Darlene Hooley from Oregon and I have had numerous conversations with Darlene and her congressional staff over the years about manufactured housing issues.
 - I am sure that any person in attendance would confirm I specifically reiterated several times that these were my comments and not the MHCC comments.

Second I took the time to personally make the MHCC members aware of the meetings and what I said and how I said them at the meetings.

- **So Bill's statement "Nor did the Chairman make any attempt to disclose them to the MHCC" is a flat out lie.** On May 4th of 2004 I sent a letter to each member of the MHCC, after the April 20, 2004 meeting with cc's to Robert Solomon, NFPA, Elizabeth Cocke, HUD, Steve Logan, City of Hamilton, Alabama and Hon. Richard C. Shelby. In that letter I stated:
 - "I made it clear the views I expressed were mine only. In preparing for the meeting, I developed the enclosed outline titled "MHCC PURPOSE & ROLE" which I handed out at the meeting. In looking at the document, the portioned underlined are my opinions. While I know some of you may agree with some of the views expressed, I did not try to poll the MHCC to develop a consensus on our views. The reason I did not is because I believe HUD is at a crossroads with the Consensus Committee and HUD needs to state their position about our role and purpose. Once stated, then the Consensus Committee can deliberate and reach consensus on our course of action."
 - I also attached my handout and reiterated the underlined were my personal comments
 - I also attached a letter from Steve Logan, Mayor of Hamilton Alabama concerning the meeting.
- The same occurred at the second meeting in January 2006. Danny Ghorbonai's summation of the meeting to Industry and Industry Associations dated January 30, 2006 (3 days after the meeting) accurately described the meeting. No where in his 4 page report is any reference that I acted on behalf of the MHCC. By then the MHCC's position on its relationship with HUD had been solidified through formal votes of the MHCC which I am sure all members of the MHCC has shared with their constituents even though you did not seek MHCC permission to do so.. For me to have written a letter to the MHCC would have been redundant.

]Third, I would ask the MHCC to pass a recommendation the Bill Matchneer retract his statement that I abused my position when I was Chairman of the MHCC.

As you consider HUD's proposed by law amendment I would suggest you consider the following:

- You each represent constituent groups that want to know what the MHCC is working on, your views of the issue and how they can provide input.
- Once an official position has been taken by the MHCC you should have the freedom to share that information and give some of the background. Remember all of your deliberations are a matter of public record.
- Given the fact that HUD has you not meeting by phone or in person on a regular basis your Chairman and Vice Chairman need the flexibility to represent the MHCC. For you to meet requires notice in the federal register and is a time delay. I find it hard to believe that you would be

having this discussion if Chuck Leven with AARP was still Vice Chairman of the MHCC. He would have laughed the Department out of the room.

- Also HUD sets your meeting dates and can stop you from taking a position by having you not meet.
- Finally in closing I am surprised that HUD did not offer another by law change to have you named the Manufactured Housing Advisory Committee since they have now made you just as effective as that committee was.

Finally for the record I will be sending a letter to the Secretary of HUD asking him if the comments made by Bill Matchneer is a reflection of HUD's official position about how I acted in my role as Chairman of the MHCC and if this is a sign of the new way his administration will be treating volunteers who have spent their time and energy helping the Department. Also in light of Bill's statements will the Department be rescinding their letter thanking me for my efforts.

Bill email

Forwarded Message:

Subj: **Fwd: Hate to belabor this, but**
Date: 4/8/2009 8:02:15 A.M. Pacific Daylight Time
From: [REDACTED]
To: [REDACTED]

example of MHCC member Response

From: [REDACTED]
To: william.w.matchneer@hud.gov, bill.farish@fleetwood.com, wjlagano@aol.com, MHARRDG@AOL.COM, doug@homemart.us, fandrwalter@verizon.net, jdberger@comcast.net, mhcckarlsr@cs.com, graceharbourchurch@yahoo.com, MikeZieman@aol.com, randy.vogt@state.mn.us, suebrenton@aol.com
Sent: 4/8/2009 10:14:41 A.M. Eastern Daylight Time
Subj: RE: Hate to belabor this, but

Yes, I remember receiving it, after I heard he testified on 'behalf' of the MHCC. He also mentioned his testimony during one of the face-to-face MHCC meetings as being 'independent' testimony.

From: Matchneer, William W [mailto:william.w.matchneer@hud.gov]
Sent: Wednesday, April 08, 2009 7:06 AM
To: bill.farish@fleetwood.com; wjlagano@aol.com; MHARRDG@AOL.COM; doug@homemart.us; fandrwalter@verizon.net; jdberger@comcast.net; mhcckarlsr@cs.com; graceharbourchurch@yahoo.com; MikeZieman@aol.com; randy.vogt@state.mn.us; Richard Weinert; suebrenton@aol.com
Subject: Hate to belabor this, but

Wednesday, April 08, 2009 America Online: DanaCRob

During yesterday's call, Dana Roberts mentioned the attached memo to the MHCC members dated approximately two weeks after the 2004 Congressional roundtable. Liz Cocke remembered receiving it and was able to locate her copy which we've turned into a PDF. However, the committee members I've spoken to since do not remember receiving a copy. You were all on the committee at the time. Did you get copies?

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Feeling the pinch at the grocery store? Make dinner for \$10 or less.

5/2/04
LDR.

May 2, 2004

Manufactured Housing
Consensus Committee Members

Re: Meeting with Congressional, Industry and HUD representatives

On April 20, 2004 I attended a meeting with Congressional staff, industry representatives and John C. Weicher, Assistant Secretary for Housing – Federal Housing Commissioner regarding implementation of the Manufactured Housing Improvement Act of 2000.

There were nine items on the agenda but most of the group's discussion focused on two: Budget / Appropriations and the Consensus Committee.

While it is obvious that the reason I was asked to attend was due to my role as Chairman; I made it very clear the views I expressed were mine only. In preparing for the meeting, I developed the enclosed outline titled "MHCC PURPOSE & ROLE" which I handed out at the meeting. In looking at the document, the portions underlined are my opinions. While I know some of you may agree with some of the views expressed, I did not try to poll the MHCC to develop a consensus on our views.

This reason I did not is because I believe HUD is at a crossroads with the Consensus Committee and HUD needs to state their position about our role and purpose. Once stated, then the Consensus Committee can deliberate and reach consensus on our course of action.

For example, also enclosed is a 10 page document titled "Housing – Manufactured Housing Standards Program- 2005 Summary Statement and Initiatives" which was handed out at the meeting. This is the first time HUD has developed such a document as part of the Budget Appropriation process. **It was made very clear at the meeting, that HUD has complete discretion as to how they will spend the \$13 million being appropriated and the information provided is only representative of what they may do.** As you know this document or the information in this document has not been shared with the Consensus Committee even though it contains some of the information various members of the Consensus Committee was asking for.

In reviewing the document, you will find a number of inferences and discrepancies. Some examples:

1. On page 1, Payments to States of \$6.6 million and Staff of \$1.75 million total \$8.35 million or 64% of the \$13 million appropriation. However, on page 5 payments to States and staff costs is expected to account for 39% of the budget or \$5.1 million. If staff costs \$1.75 million, then payments to States will be \$3.3 million; not the \$6.6 million identified on page one
2. On page 1, Contracts for Installation of \$0.25 million and Dispute Resolution of \$0.25 million total \$0.5 million or 4% of the budget. However, on page 6 they are expected to be 22% of the budget or \$2.9 million.

3. On page 1, Consensus Committee cost is \$0.25 million and on page 5 is \$0.2 million. This raises the question as to what resources will be available to get the remainder of the standards revisions we have approved into draft rule form.
4. In reading the document you may also reach the impression as I did that HUD views our primary purpose as standard development and standards development will not be a top priority in 2005 since little financial resources will be devoted to it.

Finally, I have enclosed a letter from the Mayor of The City of Hamilton, Alabama; Steve Logan, expressing his views and his reaction to the meeting for your information.

At our next conference call meeting, I am proposing we have time on our agenda to discuss this information and any formal response we may have received from HUD regarding our February 17, 2004 letter asking for HUD's interpretation of 604 (b) of the Act.

Sincerely,



Dana C. Roberts, Chairman
MHCC

Cc: Robert E. Solomon, NFPA
Elizabeth Cocke, HUD – MHP
Steve Logan, City of Hamilton
Hon. Richard C. Shelby

MHCC PURPOSE & ROLE

COMMITTEE'S RESPONSIBILITIES

1. ROLE

- ASSISTING DEPARTMENT IN SETTING PROGRAM DIRECTION & SERVICES TO BE PROVIDED Not being utilized.
- LIMITED ROLE Restricted to Standards development and not given the resources to present the revisions to the standards in draft final rule format to the Department.

2. DEPARTMENTAL ASSIGNED VS. MHIA of 2000

- STANDARDS UPDATING & REVISIONS MHCC & HUD agree the MHCC is involved updating the standards. However, HUD allocates the resources and the resources have not been provided to complete this activity.
- INSTALLATION STANDARD DEVELOPMENT MHCC & HUD agree the MHCC was to develop the initial installation standard but HUD has not said what role the MHCC will have in implementing, updating and revising the standard.
- PROCEDURAL & ENFORCEMENT REGULATIONS HUD has not identified which regulations require MHCC input. However, HUD has proposed changing the regulations concerning State funding levels without MHCC input and consideration as required by the MHIA of 2000.
- PROGRAM SERVICES TO BE PROVIDED STATES HUD has not used the MHCC for this activity.
- DISPUTE RESOLUTION PROGRAM HUD viewed the MHCC as an interest group that could comment on their solicitation of responses to a series of questions; any further role is unclear.
- INSTALLATION PROGRAM HUD viewed the MHCC as an interest group that could comment on their solicitation of responses to a series of questions. The MHCC presented HUD with an installation program model to use as a foundation for establishing a program. However, HUD's use of MHCC's work and the role of the MHCC in future HUD activity is unclear.
- BUDGET & SERVICES TO BE OFFERED HUD has not briefed the MHCC on the budget and services being offered.
- FUTURE INVOLVEMENT HUD has not indicated what role the MHCC will have between now and December of 2005 in implementing the provisions of the MHIA of 2000. However, only 3 meeting have been set with no agendas established.

COMMITTEE SUPPORT

1. ADMINISTERING ORGANIZATION CONTRACT The MHCC was not involved in determining the resources to be obtained by contract and does

not know what resources are available. However, it is clear that little, if any, resources beyond arranging for meetings and taking notes have been made available

- STANDARDS No resources were initially provided to prepare the standards in draft rule format to be presented to HUD. HUD may have only modified the contract to provide resources to do the first 20 revisions of the 170 approved by the MHCC. However, it is clear that no timeframes were made in the contract modification since rule drafting isn't completed.
- COMMITTEE ORIENTATION Not provided
- PROCEDURAL & ENFORCEMENT REGULATIONS The MHIA of 2000 indicates the administering organization is to "administer the consensus development process for procedural and enforcement regulations and regulations specifying the permissible scope and conduct of monitoring" It is clear HUD has not contracted with the administering organization for this responsibility
- APPROVAL OF ADMINISTERING ORGANIZATION ACTIVITIES TO SUPPORT MHCC MHCC had no input and does not know what services are available

2. PROCEDURAL REQUIREMENTS

- MEETINGS HUD determines how many and that FACA must be followed.
- AGENDA MHCC Chair must draft; HUD must approve and give Administering Organization the OK. However, the Chair does not know what HUD is working on and consequently where MHCC input could help.
- DISTRIBUTION OF MATERIALS HUD indicates all materials sent to the MHCC must go through the Administering Organization but will only allow distribution after they approve.
- COMMUNICATIONS TO THE DEPARTMENT HUD indicates that all formal communications to HUD must go through the administering organization.

3. COMMITTEE ORIENTATION

- BRIEFING OF MHCC ON BUDGET Not provided
- BRIEFING OF MHCC ON HUD SERVICES Not provided
- BRIEFING OF MHCC ON REGULATIONS Not provided
- BRIEFING OF MHCC ON STATE PROGRAMS; THEIR ROLE AND RELATIONSHIP WITH DEPARTMENT Not provided
- BRIEFING ON CONTRACTED SERVICES; WHO DOES WHAT AND WHY Not provided
- MHCC'S FUTURE ROLE Hasn't been shared with the MHCC

ATTACHMENT B
MINUTES
JULY 9, 2009 CONFERENCE CALL

Draft minutes
HUD Manufactured Housing Consensus Committee
Conference Call
July 9, 2009

1. Chairwoman Brenton called the meeting to order at 11:05 a.m. Mr. Solomon called the roll. A question was raised about the status of Mr. Farish, given his change in employer. Mr. Matchneer stated that because Mr. Farish's new employer is also a manufacturer his status is unchanged. Mr. Farish indicated that his new employer supported his continued participation. A quorum was present. Mr. Matchneer introduced HUD staff on the call. Mr. Solomon asked guests to introduce themselves. There was a request for a new contact list.

Ms. Brenton indicated that public testimony would be moved to the end of the agenda to allow adequate time for testimony.

Mr. Walter asked whether it is possible for members to receive a hard copy of lengthy documents. Mr. Gorman added that it would be helpful for those who use their personal printer. Mr. Solomon noted that the major Standard Developing Organizations have moved away from providing hard copies. HUD should consider whether hard copies should be provided. Mr. Lubliner suggested that perhaps it could be done if only a few needed hard a hard copy. Ms. Brenton recommended that those needing hard copies in the future contact the AO office.

2. To begin the discussion of the Primary Inspection Agency draft proposed rule, Mr. Lagano asked whether it would be worth discussing alternatives to get to the same point. Ms. Brenton asked Mr. Lagano to hold the question. She called on Mr. Gorman to present the report of the Regulatory Enforcement Subcommittee.

Mr. Gorman reported that the Subcommittee had one conference call. The Subcommittee considered forwarding the Primary Inspection Agency (PIA) draft proposed rule to the full Committee to review. It was decided that the Subcommittee should identify the policy issues contained in the draft proposal. Mr. Matchneer noted that there were both policy issues and quality issues in the proposal. The Subcommittee noted that the proposal was lacking justification and cost information. Mr. Lagano asked why the proposal is being made. Mr. Ghorbani noted that HUD does not have the funding to do inspections internally therefore it uses PIAs. He noted that last year HUD raised the question of improving the PIA process. Now HUD has come forward with a proposal.

Mr. Lagano asked whether HUD had the resources to implement the changes. He also asked what the cost to the consumer would be. Mr. Lubliner asked whether the impact on the consumer would be thousands of dollars or have little impact. He also noted that industry should be able to estimate the costs. He also noted the paperwork burden. Mr. Ghorbani noted that the industry is hurting and that the proposal is overkill and not necessary. Mr. Lagano suggested that the Committee be polled to determine whether it wants to comment on the draft or send it back to HUD with a cover letter indicating that without cost and justification information the Committee can not comment.

Mr. Matchneer indicated that HUD has followed the usual procedure of providing the Committee with a draft document for a 120 day review and comment. He noted that it would be unfortunate for the Committee not to provide comments. He noted that many useful comments were

provided during the Regulatory Subcommittee conference call, further discussion by the MHCC would be beneficial. Mr. Ghorbani noted that HUD has done its job in providing the Committee with the draft with a document for a 120 day review but it has not provided cost information. Section 604(e)(4) requires consideration of the probable effect on the cost of a manufactured home.

Mr. Matchneer noted that if the MHCC does not comment the document to be sent to the Secretary will be incomplete. The MHCC has an obligation to consider such action carefully. An incomplete proposal could adversely affect the regulated parties. He encouraged the MHCC to read the law carefully.

Ms. Nelson noted that the process has been in use for many years, the cost justification for the changes is necessary to make an informed decision. It is difficult to make one when industry states one cost and HUD another. Mr. Braun stated that cost must be addressed. Mr. Gorman raised the question as to how many defective homes have been sold in the last several years, noting that good, low cost homes have been sold to consumers. He also noted that less than fifty thousand homes have been built this year. Mr. Lagano asked whether the proposal addresses a systemic problem. Manufactured homes should not be priced out of the market. Mr. Berger noted that the MHCC has developed a form for proposals that requires a justification statement. He also stated that the PIAs submit reports to HUD so data on defective homes could be developed.

Mr. Weinert stated that CA has recall statistics for 2003 – 2008. There is wide variation. He noted that the data does not include recalls of defective parts from a supplier. Almost 2% of homes produced in 2003 were in recall. He noted that the program has not been enforced correctly. As an Administrator he needs the ability to take administrative action before a problem gets worse.

Mr. Ghorbani stated that HUD must come forth with the data. Mr. Weinert noted that it should be included in the rulemaking package. Mr. Lagano stated that the cost and justification should be included at the beginning of the process not at the back end. Mr. Solomon asked whether Section 604(e)(4) pertained to just standards or included regulations and interpretations. Mr. Matchneer indicated just standards. Mr. Walter stated that it included all. Mr. Lagano noted that a ball park cost estimate would suffice. Mr. Farish noted that some costs can be estimated easily, others not. There are a lot of indirect costs, including possible increases in DAPIA and IPIA fees and possible increases in label fees.

Ms. Brenton asked whether the policy issues should be discussed now or just comment that without cost and justification the MHCC can not consider the proposal. Mr. Walter moved that consideration of the proposal be tabled until justification is received. Mr. Lagano seconded. Mr. Berger expressed a concern that the clock is ticking. Mr. Ghorbani stated that the MHCC should protect its authority and functionality. He recommended that the Regulatory Subcommittee present its report and that decisions be held until the MHCC meeting later this month. Ms. Nelson and Mr. Gorman concurred. Mr. Gorman moved to call the question. Mr. Braun seconded. Motion passed unanimously. Mr. Walter withdrew his motion, Mr. Lagano accepted.

Mr. Slifka noted that there had been an opportunity last year to address monitoring and quality. At the time the Subcommittee declined to discuss the issue, stating that such an issue should be initiated by a proposal from HUD. He also noted that there is a lot of information collected by the monitoring agent that is not forwarded to HUD. If HUD and the third parties determined who

had what information, then the information would be available to HUD to develop a proposal. Mr. Ghorbani expressed a concern about the effect on manufacturers.

Ms. Brenton asked Mr. Roberts to review the policy issues contained in the draft proposed Procedural and Enforcement Regulations the Regulatory Subcommittee identified on its conference call. She asked the Committee to consider whether the issues were “policy” issues and should be discussed at the MHCC meeting. Mr. Roberts initiated a review of the policy issues identified by the Subcommittee. After several were reviewed Mr. Weinert moved that the entire list be accepted as policy issues to be discussed at the July meeting, Mr. Lubliner seconded. Motion carried unanimously.

3. Ms. Brenton called for public testimony. There was none.

Mr. Solomon asked members to inform Ms. Pereira of their hotel requirements.

A motion to adjourn the call was seconded and carried. Call concluded at 12:55 p.m.

HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
ATTENDANCE SHEET
CONFERENCE CALL
Thursday, July 9, 2009

STATUS: M=MEMBER; NVM=NON VOTING MEMBER; AO= ADMINISTERING ORGANIZATION
 SEC=SECRETARY

NAME	STATUS	ORGANIZATION	Attendance	
			Yes	No
Berger, Jack	M	Berger Reconstruction	X	
Braun, Karl	M	NAMH – MHOAA		X
Brenton, Susan	M	MHCA	X	
Desfosses, Theresa	M	ME Manufactured Homes		X
Farish, William	M	Fleetwood Homes	X	
Ghorbani, Danny	M	MHARR	X	
Gorman, Doug	M	Home-Mart, Inc.	X	
Jewell, Kevin	M	TX Low-Income Housing Info Service		X
Lubliner, Michael	M	WAU Energy Program	X	
Luttich, Mark	M	NB SAA	X	
Matchneer, William	NVM	HUD	X	
Nelson, Terry	M	MHOA OF IL	X	
Sheahan, Timothy	M	GSMOL/V.P. MHOAA	X	
Solomon, Robert	AO	NFPA	X	
Stamer, William	M	Champion Homes	X	
Toner, Pat	AO/SEC	NFPA	X	
Vogt, Randy	M	Minnesota Dept. of Labor & Industry	X	
Wade, Michael	M	Cavalier Home Builders, Inc.		X
Walter, Frank	M	Consultant	X	
Weinert, Richard	M	State of CA	X	
Zieman, Michael	M	RADCO	X	

HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
CONFERENCE CALL
Thursday, July 9, 2009

GUEST ATTENDANCE SHEET

NAME	ORGANIZATION	ATTENDANCE
Brolin, John	HUD	X
Brown, Dan	HUD	X
Carpio, Daniel	HUD	X
Everett, James	HUD	X
Hunt, Giles	HUD	X
Kritikos, Effi	HUD	X
Mendlen, Rick	HUD	X
Pastiglione, Amanda	HUD	X
Podzius, Casey	HUD	X
Race, Peter	HUD	X
Wallace, Angelo	HUD	X
Nebbia, Joe	Newport Partners	X
Nolan, Rick	HWC Engineer	X
Gustafson, John		X
Dents, Jordan	SBRA	X
Roberts, Dana	Retired	X
Slifka, Mike	PFS	X
Reinhart, Dick	PFS	X
Husom, Jim	PFS	X
Weiss, Mark	MHARR	X

ATTACHMENT C

MINUTES

JULY 28-30, 2009 ARLINGTON, VA

AUGUST 7, 2009 CONFERENCE CALL

AUGUST 20, 2009 CONFERENCE CALL

AUGUST 27, 2009 CONFERENCE CALL

**SEPTEMBER 1, 2009 CONFERENCE
CALL**

Draft Minutes
HUD Manufactured Housing Consensus Committee
Holiday Inn
Arlington, VA
July 28-30, 2009

Tuesday, July 28

1. DFO Matchneer announced that this is a meeting of the Manufactured Housing Consensus Committee. Chairwoman Brenton called the meeting to order. Mr. Solomon called the roll; a quorum was present. Ms. Brenton announced that the agenda has been modified to include a report from DOE on its energy conservation activity related to manufactured housing at the start of the Thursday morning session.

Mr. Matchneer introduced Mr. Jim Everett who has replaced Ms. Dickerson in the HUD management of the program. He also introduced new MHCC members Messrs. Sheahan, Walter, Wade and Jewell. Messrs. Jewell, Sheahan, and Walter are General Interest members, Mr. Wade is a Producer. Mr. Matchneer noted that Mr. Farish will continue as a member of the Committee as a Producer member

Mr. Ghorbani asked about the minutes of the past meeting and conference calls. Ms. Brenton indicated that copies are being distributed for Committee review. Approval will be in the Thursday morning session of the Committee.

The agenda was further modified to allow more time for review and discussion of the draft proposed PIA rule. The agenda, as modified, was approved.

2. Mr. Matchneer stated that the Charter and Bylaws are still a work in progress within the Department and there will be no action at this meeting. Mr. Ghorbani noted that the May 2009 minutes are important for the discussion of the MHCC Charter and Bylaws. Mr. Ghorbani stated that it is important for the Committee to protect its rights and privileges under the MHIA 2000.

Mr. Matchneer reported that Mr. David Stevens has been appointed Housing Commissioner. Mr. Stevens is a former executive with Long and Foster.

Mr. Matchneer noted that the manufactured housing program has transformed its focus to quality assurance and quality control rather than one of "counting defects". IBTS will be "consulting" with manufacturers regarding QA and QC. Consultations have been held in about 30 facilities and so far have been very well received.

Mr. Matchneer reported that six rule packages are at the Office of the General Counsel. He recognized that the Committee and HUD staff have put a lot of work into these documents. However, the new Administration is reviewing all proposals, not just HUD's, before they are released for publication in the Federal Register. Among the rules are the second set of standards, the on-site rule, the truss rule, Subpart I, and the third set of standards. He expressed hope that the rules clear the process soon.

Mr. Matchneer noted that Mr. Everett is working with GSA and HUD to get the MHCC Charter and Bylaws in line with FACA, particularly the Subcommittee and Task Group operating practices.

Mr. Matchneer reported that 33 states have applied to run a manufactured housing program; 22 have been approved.

Mr. Matchneer reported that the manufactured housing program has received a direct appropriation which allows the program to directly contract with states to implement a state plan.

Mr. Matchneer noted that personnel from other Agencies have volunteered to assist with the Dispute Resolution program. He noted that the program has yet to be used. The Department is working on a contract to provide services for the program.

Mr. Ghorbani asked what the Department can do to help states with implementing installation programs. He asked whether the Congress should be approached about recodifying installation. Mr. Matchneer stated that the language is clear that there is no preemption. He noted that HUD cannot implement a regulatory requirement, a statutory revision would be necessary. Mr. Gorman noted that his experience at the state level would encourage support for preemption. He also noted that localities have used foundation requirements that price manufactured housing out of the area. Mr. Vogt noted that some building codes have also had the same effect.

Mr. Lubliner asked what HUD's role is on sustainability. Ms. Cocke noted that energy is an area of involvement although DOE has the lead and HUD has not been formally approached by DOE.

Mr. Luttich noted that Nebraska, South Dakota, Wyoming and Missouri had discussed creating a regional installation authority. Ms. Cocke noted that it presented enforcement issues and legal issues and in the end it was not able to be put together. Each state would have had to vote to give up its authority in this area. Mr. Jewell stated that there should be a Federal floor but not be preemptive.

Ms. Defosses asked whether there were funds or grants to help states. Mr. Matchneer indicated that there were not although states are helped through label fees. Mr. Vogt noted that states do help neighboring states. Mr. Lubliner expressed a concern that HUD does not have enough funds for the manufactured housing program. Mr. Lubliner noted that the Washington state budget for manufactured housing has been substantially cut.

Mr. Lagano moved that the issue be referred to the Regulatory Enforcement Subcommittee to draft a position for consideration by the MHCC; Mr. Gorman seconded. Mr. Ghorbani recommended that Subcommittee give consideration to recommending HUD guidelines for programs and to research whether there is discrimination in local requirements. Ms. Brenton stated that the Subcommittee should draft a fact-based position. Ms. Cocke stated that it is outside the purview of the MHCC to consider legislative activity. Such discussions should be conducted outside of the MHCC. Mr. Ghorbani offered a friendly amendment to indicate that the draft was for the MHCC and not for legislative action. Amendment accepted. Mr. Lagano indicated that the draft not be a "policy" but rather a report on progress and feedback. Mr. Lubliner is interested in the costs to states to implement installation programs. Mr. Gorman is interested in gathering facts on where local foundation requirements have effectively "zoned out" manufactured homes from an area. Mr. Weinert noted that California passed legislation to prohibit discriminatory zoning. Motion, as amended, failed, 6 in favor, 8 opposed.

3. Mr. Everett reported that under FACA the MHCC Charter will be up for review next year. The

new administration is reviewing the ethics and conflict of interest rules that apply to all 1000 or so Federal Advisory Committees, including the MHCC.

He also noted a new House bill, H.R. 1320, *To amend the Federal Advisory Committee Act to increase the transparency and accountability of Federal Advisory Committees*. He noted that among the provisions is a requirement to provide a transcript of Committee proceedings, record members participating and guest comments. Records would be kept in the National Archives. There is no indication of activity on the bill, although it has received some support.

He also reported that HUD will be appointing an Advisory Committee Officer. HUD is behind other agencies in this respect.

4. Mr. Everett introduced Mr. Michael Kirkpatrick who made a presentation on FACA and Federal Advisory Committees. Mr. Kirkpatrick is from the Litigation Group of Public Citizen. Public Citizen is a national, nonprofit consumer advocacy organization founded in 1971 to represent consumer interests in Congress, the executive branch and the courts. The Litigation Group is an advocate of open government, including operation of Federal Advisory Committees. He noted that Public Citizen has litigated two cases at the Supreme Court regarding Federal Advisory Committees. He noted that the goal is to end domination by special interests and encourage openness.

Mr. Ghorbani asked if Mr. Kirkpatrick was familiar with the history of the MHCC, the MHIA 2000 and the role of FACA. Mr. Kirkpatrick noted that the MHIA 2000 required the MHCC be balanced among producers, public interest, and consumers. He encouraged everyone to participate and to be active and engaged. He noted that the Committee must avoid even the appearance of unfairness. Minutes should be reviewed and reflect all points of view expressed. Committees develop better recommendations if there is balance, debate and dissent. Dissenters should explain their reasons for dissent. Mr. Zieman asked whether the same requirements apply to Subcommittees and Task Forces. Mr. Kirkpatrick indicated not necessarily but Subcommittees should be balanced.

Ms. Brenton thanked Mr. Kirkpatrick for his comments.

5. Ms. Brenton lead a discussion of the draft proposed PIA rule. Mr. Ghorbani stated that the package is not complete as cost information is not included. It is difficult for the MHCC to vote on a proposal that is not complete. Mr. Solomon noted that the Committee must submit its comments to the Secretary by September 8, 2009, so there is not much time to complete the review. Mr. Matchneer noted that there is limited time for follow-up conference calls. Ms. Nelson echoed Mr. Ghorbani's comment about the package being incomplete. Mr. Weinert noted that the publication of the proposal will contain the cost information. Mr. Ghorbani stated that the review should proceed. Ms. Brenton recommended that the MHCC comments include

a statement that the Committee did not have the opportunity to review the entire package. Ms. Nelson concurred. Mr. Lubliner asked whether cost information would be limited to first cost without consideration of lifetime cost and maintenance costs.

Mr. Matchneer noted that the emphasis of the program has been changed from “30 years of counting defects” to emphasizing quality programs. The HUD label signifies the home complies with the standards. He noted that quality emphasis is considered the best way to ensure such. He stated that the new emphasis has been well received in those facilities where it has been implemented. Mr. Ghorbani expressed a concern that this proposal is based on an experience with one plant rather than a systematic review. He also noted that the cost of compliance needed to be evaluated for its effect on the consumer and be justified. He reiterated that it is difficult to evaluate the draft proposal because costs and justification is not included. Mr. Lubliner noted that his personal experience with refinancing would suggest that a proper quality assurance program would help improve the image of manufactured homes with lenders. Mr. Weinert stated that it would be incorrect to characterize this issue as a result of a rogue facility. By correcting that situation all facilities in the state were improved. Mr. Gorman stated that it is important to know how the cost of this proposal would impact the consumer’s ability to pay for a home.

Mr. Matchneer stated that cost and justification will be considered in the rulemaking process. He also noted that the MHCC has worked on several rules that did not contain formal cost estimates in advance of MHCC consideration. He did note that one IPIA reported that the cost for conducting the consultation in one facility was about \$2000. Another estimate was \$500. Both would be one time costs. It is not clear how to factor this cost into the number of homes produced. He noted that the program would have a two year trial and then would be assessed. He indicated that the Committee was welcome to include an overall statement regarding the absence of cost information but he encouraged the Committee to take this opportunity to submit comments. Mr. Gorman noted that the costs mentioned were separate from the requirements in the draft proposal. Mr. Matchneer concurred. Mr. Gorman stated that it is the costs of implementing the proposal that are being sought.

Mr. Luttich indicated that he is lukewarm about the quality assurance approach. Facilities currently have QA manuals but some choose not to follow them. He asked what the hammer is. Mr. Matchneer indicated that there could be a heavy fine assessed. Mr. Lubliner indicated that he would like to see energy efficiency and durability included in the definition of quality assurance.

Mr. Zieman stated that this discussion of a quality assurance initiative is not related to the document being considered. He suggested that HUD indicate the justification for elements of the proposal as we go through it. He also noted that while it would be nice to have costs, absence of cost data has not precluded the MHCC from acting in the past and that subjective estimates could be made.

6. The Committee reviewed the draft proposal. Numerous editorial or clarifying changes were recommended. Discussion of specific significant items or controversial items follows.

3282.7 Traveler: Mr. Luttich suggested that requiring a *Traveler* might preclude innovation, something better may come along. Mr. Vogt agreed that a traveler was not necessary. It was noted the activity record in a traveler is addressed in 3282.362(b)(1)(i). *Traveler* to be deleted.

Red tag: There was a discussion of what red tag actually means. “Affix” was changed to

“provide” and it was clarified that only uncorrected issues needed to have a red tag.

3282.202(b) Mr. Stamer questioned why copies of contracts should be sent to the Secretary. Mr. Weinert indicated that the HUD review could prevent conflicts of interest and ensure that the contract complied with all laws and regulations. Mr. Stamer noted that PIAs are under the control of HUD so it should not be necessary. Mr. Luttich noted that review would identify manufacturers that change IPIAs frequently. It was agreed that “contract or other agreement” should be changed to “statement of work”.

3282.202(d)(1) There was a discussion and debate as to whether the manufacturer should receive a copy of the transfer notice and explanation of the circumstances that lead to a transfer to a new PIA. It was moved, seconded and carried 9-6 that a manufacturer should receive a copy. Those opposed expressed the view that it was not necessary.

3282.202(d)(2) There was a discussion of what information should be passed on to the new PIA.

3282.203 (c)(6)(v) – Delete, management function

3282.204 There was a general discussion of the responsibility and services of the IPIAs. It was noted that in the past PIAs were sometimes incorrectly viewed as guarantors. Mr. Zieman noted that PIAs verify the manufacturers are capable of producing homes that conform to the standard. When the IPIA identifies a problem it is brought to the attention of the manufacturer. Ms. Nelson asked what happens after the manufacturer is notified. Mr. Zieman indicated that the IPIAs responsibility ends. Mr. Weiss noted that the Act does not address follow-up. Mr. Vogt noted the role of the SAA in the process. Mr. Pethel noted that the IPIA would need to reevaluate the manufacturer’s QA program. Mr. Zieman stated that the proposal imposes new responsibilities on the PIAs.

3282.204(b) There was a discussion as to whether the IPIA should be evaluating the manufacturer’s personnel. It was moved seconded and carried that “personnel” be deleted; Weinert opposed.

3282.204(e) There was a discussion of the words “or reason to know”. It was decided that “knows or reason to know” be changed to “determines”. It was mentioned that this duplicates requirements in 3282.404. Mr. Weinert noted that it allows the IPIA to be involved at the earliest possible point for correcting the problem. Mr. Braun moved that the paragraph be accepted as written. Motion seconded but failed to pass. Mr. Luttich noted that if an IPIA finds a non-conformance he normally checks whether there are others. Ms. Defosses moved that the entire paragraph be deleted. Motion seconded but failed to pass in a tie vote, 8-8.

The Committee recessed for the day at 5:00 p.m.

Wednesday, July 29, 2009

The Committee reconvened at 10:30 a.m.

7. Mr. Lagano asked about the status of ground anchor testing. He noted that the project has been on hold for over a year. Mr. Mendlen reported that a new contract with Jay Crandall will be let soon to evaluate the draft protocol developed by the MHCC. It was noted that the prior testing project was inconclusive, although it was not intended as an evaluation of the protocol. It was decided that the project should remain as a full Committee project rather than return it to the Subcommittee.

Mr. Matchneer reported that Mr. Tom Rodgers from "Gassing America" will be making a presentation during the public comment period. Mr. Rodgers is raising concerns regarding the placement of a fresh air intake vent within 3 feet of an exhaust vent which may permit CO to be drawn into the home. Mr. Zieman noted that the International Residential Code (IRC) has a 10' separation if the vent is less than 2' tall. Mr. Walter suggested the CO detector issue be considered. Mr. Jewell noted that such a public comment needs to be given an adequate treatment. Mr. Matchneer stated that Mr. Rodgers has been given 10 minutes for his presentation and discussion.

8. The discussion of the PIA draft resumed.

3282.204(e) Mr. Zieman suggested replacing the last two sentences with new language requiring the IPIA to verify that the manufacturer has conducted an investigation under 3282.404 on unsold homes not isolated to the manufacturer's facility or retailer lots. There was a discussion as to potential for confusion between this section and Subpart I.

Mr. Weinert moved that Mr. Zieman's suggestion be made; Lubliner seconded. After further discussion a motion to call the question carried. Motion voted on and carried.

Ms. Defosses moved that "or sections thereof" be deleted in all three places; Walter seconded. It was noted that at some point HUD will have to deal with multi-wides and that this should stay in. Mr. Zieman noted that the phrase is redundant; a home includes the sections. Motion carried.

Mr. Walter noted that a requirement that the manufacturer determine the cause of a problem should be added. He moved that such language be inserted in the first sentence. Motion seconded by Ms. Nelson and carried.

3282.205(a) It was noted that this is not currently being done. It was moved, seconded and carried that this paragraph be deleted.

3282.205(d) Ms. Defosses moved that "and the regulation" be deleted at the end of the first sentence. Motion seconded and carried.

It was moved and seconded that the entire second sentence be deleted as it is unnecessary. Mr. Jewell stated that the presence of the label is a certification that the home does not contain an imminent safety hazard and complies with the HUD construction and safety standards, and clarifies that the consumer has legal recourse if it does not. Mr. Weiss noted that the provision is already covered by the statute. Motion carried.

There was a discussion as to whether “or section thereof” should be deleted. After discussion It was moved, seconded and carried that “or” be changed to “and”. “or sections thereof should be retained in the previous paragraph.

3282.206(c) It was noted that approval by the Secretary is not necessary if both parties resolve the disagreement.

3282.208(b) Mr. Weiss recommended that this paragraph be removed as it paraphrases Subpart I. A rewrite, deleting “may be required to correct noncompliances” was moved, seconded and carried.

Mr. Walter requested that HUD provide the Committee members with a copy of the standard.

3282.210(b) Second sentence rewritten – IPIA must not issue labels until it has evidence that payment has been made”. Rest deleted.

3282.212 There was a discussion of how files are to be kept and cross referenced. It was noted that Subpart I requires the SAA to inspect records. Ms. Defosses noted that all files are made available; Mr. Zieman noted that they should be readily accessible. Mr. Weinert expressed a concern regarding conversion of paper files to electronic ones. Mr. Jewell suggested the files be in an easily accessible format. Mr. Gorman moved that the issue be tabled to allow the stakeholders discuss; motion seconded and carried.

3282.351 Mr. Vogt noted that the first paragraph is repeated from the Act. It was moved, seconded and carried that it be deleted.

3282.351(b)(3) Mr. Weinert proposed a rewrite of the paragraph to indicate that the PIA verifies the facility’s capability. Motion to accept his rewrite made, seconded and carried.

3282.351(b)(5) Mr. Weinert proposed a rewrite of the paragraph to indicate that the PIA must be able to recognize problems and approve the manufacturer’s determinations. Motion to accept his rewrite made, seconded and carried.

During the discussion, Mr. Matchneer noted that the PIAs do not certify homes; they verify the manufacturer’s capability to produce homes that conform to the Construction and Safety Standards. HUD, then, essentially licenses a facility to produce homes. Mr. Lubliner asked whether HUD had the resources to validate the verification. Mr. Matchneer stated that the resources were sufficient at IBTS.

3282.352(c) Clarified to indicate how applicant intends to “operate on behalf of the Secretary”.

After a short recess the Committee discussed how to handle the reference standards in the 3rd set of Construction and Safety Standards. Mr. Matchneer noted that the 3rd set had been approved by the MHCC three years ago so the reference standards must be reviewed to ensure they are current. To use out-of-date standards contributes to the impression that the HUD standards are not up-to-date with current practices. He noted the issue in the 1st set with the NEC and receptacle placement.

Mr. Solomon indicated that he had reviewed the list of reference standards for the latest dates and availability.. He distributed the review. It was noted that ASC 7 calculates wind loads with

different methodology than the MHCC. Mr. Mendlen noted that the Wind Task Force is considering ASC 7. Mr. Zieman recommended that the latest date reference standards for appliances in 3280.703 be approved as all appliances now comply with those standards. Mr. Solomon indicated that the plumbing standards are not applicable to the 3rd set. A concern was expressed about NDS 2001.

Mr. Walter moved that, with the exception of ASC 7 and NER 272, HUD should publish the 3rd set with all the standards on the list updated to the current version, where standards have been replaced use the replacement. Vogt seconded. **IT IS NOT CLEAR WHAT IS TO BE DONE WITH NDS 2001, IF ANYTHING)**

A question was raised whether the reference standards in the 2nd set should be reviewed. Mr. Matchneer stated that it is ready for publication as a proposed rule, pending Administration review. Updates can be submitted during the public comment period. Mr. Mendlen indicated that it was not clear whether the reference standards in the 3rd set had actually been voted on by the Committee. He noted there had been discussion but is unclear whether a vote was taken. Messrs. Weinert and Stamer noted that it is impossible to keep up with changes in standards. Mr. Vogt stated that the references should not be different than those in the IRC so that small manufacturers of both manufactured homes and modular homes only have one set to deal with. Mr. Zieman noted that there are three categories of reference standards – material and appliance standards that are pretty safe to update, design standards, e.g. NDS 2001, and the NEC and ASC 7.

Walter motion carried 12-1.

Discussion of the draft PIA rule continued.

3282.353(b) There was a discussion of whether HUD could or should approve state fees. It was noted that states must justify fees to the state legislature. It was suggested that if states must disclose fees, private IPIAs should also. It was noted that state fees are public. Mr. Vogt indicated that if states can't do onsite inspections without being an IPIA, then states will give the program back to HUD or become an IPIA. Ms. Defosses moved that all but the first sentence of this paragraph be deleted. Ghorbani seconded. Motion carries.

3282.356(f) Ms. Danner asked what the intent of the paragraph is. Mr. Matchneer indicated that it was a way for HUD to take corrective action with a PIA as they are not HUD employees.

3282.358(a) Mr. Walter moved that the last sentence of the original 358(a) regarding adequate personnel be restored. Zieman seconded. Mr. Lubliner noted that there also needs to be adequate funding. Motion amended to require adequate funding to provide sufficient personnel. Motion carried.

The Committee recessed for the day at 4:55 p.m.

Thursday, July 30, 2009

The Committee reconvened at 8:05 a.m.

9. Mr. Chris Early, DOE, made a presentation on the DOE program on energy efficiency for manufactured housing. He distributed copies of a presentation prepared by Robert Lucas,

Pacific Northwest Laboratory. He noted that DOE is required to use the International Energy Conservation Code as the basis of its considerations. The DOE must consult with HUD and provide a public comment period. He expects that a Notice of Proposed Rulemaking (NPRM) will be published in early 2010.

Mr. Weinert asked if DOE will be consulting with state energy commissions. Mr. Early indicated not yet but DOE will keep that in mind. Mr. Lagano asked if DOE is aware of the MHCC's interest in the DOE activity. He asked whether DOE has a "line of demarcation" between DOE's activity and the MHCC's. Mr. Matchneer noted that Messrs. Dave Conover and Robert Lucas, DOE, have prior experience with manufactured housing. Mr. Lagano asked whether the MHCC will submit comments as the MHCC. Mr. Matchneer indicated that he would have to discuss this with the Commissioner. Mr. Walter said that he was pleased to see DOE was considering life-cycle costing. Mr. Early indicated DOE would welcome input on life-cycle costing.

Mr. Ghorbani emphasized that Congress specifically wants DOE to work with HUD. He recommended that DOE work with the MHCC early in the process as the MHCC can provide a lot of help. Energy use is an important consideration in manufactured housing. Mr. Matchneer noted that DOE has been good about keeping HUD apprised of its activity. Mr. Zieman asked whether the NPRM will ask for comments on issues such as lighting, whole-house ventilation and solar heat gain. Mr. Early stated that Section 413 of the energy act allows many aspects to be considered. Mr. Early indicated that he expects to work closely with HUD; Mr. Matchneer indicated that he expects a Memorandum of Understanding (MOU) to be developed between DOE and HUD. Ms. Brenton thanked Mr. Early for his presentation.

10. Ms. Brenton opened the floor for public testimony.

Mr. George Waechter, Minute Man Anchors, thanked the MHCC for looking at the galvanizing issue for anchors. He asked what the reason is for developing a protocol for testing ground anchors. Mr. Mendlen stated HUD has been studying anchor for many years because of high wind failures. Mr. Matchneer noted that currently there is nothing in the standards on how to evaluate anchors. Mr. Waechter indicated that he would welcome a rigorous standard. He indicated that independent testing agencies that he has talked to would be willing to assist in evaluating the MHCC draft protocol.

Mr. Stamer noted that the industry is in its worst condition. He indicated that he felt like the Committee is rearranging the deck chairs on the Titanic. He stated that the Committee needs to be cognizant of the state of the industry and not kill it with regulations. He asked what the MHCC or HUD could do to help. Mr. Matchneer noted that under former Commissioner Montgomery HUD has pressed Fannie Mae and Freddy Mac to better serve manufactured housing. He noted that there is a big problem in the secondary market. Ms. Brenton stated that manufacturers could work with manufactured housing communities to open local opportunities for financing. Mr. Sheahan noted that H.R. 2454 provides for a rebate for low income homeowners that purchase a new Energy Star manufactured home. Mr. Long noted the rebate is limited to homes made prior to 1976. Mr. Sheahan reported that he has met with FHA regarding its duty to serve the manufactured housing market. Ms. Nelson and Mr. Gorham noted that affordability including ability to pay is a critical factor. Mr. Ghorbani noted that every time a cost is added someone is eliminated from the market. Mr. Lubliner expressed a concern about the industry.

Mr. Tom Rodgers, a self-described citizen lobbyist from GassingAmerica.us, made a PowerPoint presentation regarding concerns over the placement of fresh air intake vents within

3 feet of an exhaust vent which may permit CO to be drawn into the home. He noted that he became involved in the issue when a family asked for his assistance in the case of their ill child. He noted that he suspected that the child exhibited the symptoms of CO poisoning. In looking for potential sources he noted that the dilution air intake vent was within 3 1/2 feet of the combustion exhaust vent. He also noticed that all the homes in the community had the same design. He noted that the HUD code only requires a separation of 3 feet whereas the building code requires 12' – 14'. He urged the MHCC to change the HUD code.

Mr. Zieman asked if the CO level had been measured. Mr. Rodgers indicated that measurements at the intake showed 200 ppm.

Mr. Rodgers circulated a copy of his photos.

Mr. Matchneer thanked Mr. Rodgers; he indicated that he appreciated the effort Mr. Rodgers made to come to the meeting and make his presentation.

There were no further public comments.

11. Chair Brenton resumed the Committee meeting at 9:15 a.m. She called for approval of the minutes of past meetings and conference calls.

The minutes of the April 7, 2009 conference call were approved.

It was noted that the statement read by Mr. Roberts was not attached to the May 7, 2009 Conference call minutes as indicated in the minutes. Mr. Solomon indicated that the attachment was still being discussed with HUD. Mr. Matchneer stated that HUD had no objection. Mr. Ghorbani moved that approval of the May 7, 2009 minutes be tabled until the record is complete.

The minutes of the June 17-19, 2008 meeting were approved.

The minutes of the July 16, 2008 conference call were approved.

12. Planning and Prioritization Subcommittee,

Mr. Lagano reported that the project list would be revised and updated. He noted that the MHCC procedures state that a submitter must be notified if his/her proposal is rejected by the Committee. He noted that some proposals have been rejected by the Subcommittee but never moved from there. Mr. Zieman indicated that some proposals would be brought forward for Committee action during the Technical Subcommittees' reports.

Mr. Solomon reported that a new form with instructions has been developed for proposals. He asked whether a Federal Register notice should be published seeking comments to changes to the standards. Mr. Lagano noted that in previous meetings it was agreed that HUD would not have to use the form for proposals it wished the Committee to consider.

Mr. Ghorbani stated that, given the state of the industry, proposals should be reviewed very carefully for justification. He noted that members should be cognizant of their responsibility to protect the affordability of manufactured housing. Mr. Lubliner noted that members must not only consider first cost but also ongoing costs of homeownership. Ms. Brenton noted that cost savings should also be considered. Mr. Weinert stated that proposals should be evaluated on

their merit. Mr. Solomon stated that the AO would not reject a proposal if it did not include justification; that should be done by the Committee. Ms. Brenton stated that the relevant Subcommittee should make the determination as to whether cost and justification is included in the proposal. Costs may necessarily be approximate.

Technical Structure and Design Subcommittee

Mr. Solomon reviewed the actions that may be taken on a proposal. Actions taken by the Committee would then be submitted to a letter ballot for confirmation. This would also allow for a minority opinion to be recorded.

Mr. Zieman stated that there is a standing motion to accept the Subcommittee recommendation. He stated that there are two items for MHCC action

The Subcommittee rejected Log 29; the matter is already covered in the HUD code. MHCC accepted the recommendation.

The Subcommittee rejected Log 66; the proposal was not presented in code language and appeared to be a proprietary system. The MHCC accepted the recommendation.

Technical Systems Subcommittee

Mr. Zieman stated that there are six current items and two items from last year for MHCC action.

The Subcommittee rejected Log 22; moisture can move both in and out. MHCC accepted the recommendation.

The Subcommittee rejected Log 24; the Subcommittee was not convinced of the validity. MHCC accepted the recommendation, Lubliner abstaining.

The Subcommittee rejected Log 35; there is no member experience that this is a problem.

The Subcommittee tabled Logs 57, 58, and 61.

The Subcommittee accepted Log 60. Mr. Stamer stated that the consumer should be allowed to decide whether they wanted to pay for an Energy Star appliance. Mr. Ghorbani recommended that the Committee not do anything on energy pending action by DOE. Mr. Weinert noted that DOE is not addressing appliances. Mr. Walter said if DOE is not addressing the MHCC should. Ms. Defosses said the consumer should be given a choice. Mr. Lubliner stated that if Energy Star appliances were mandated, the increased demand and buying power of the manufacturer would reduce the price. Messrs. Gorman and Zieman agreed that the consumer should be given a choice. Mr. Lagano suggested that the discussion be tabled until it is clear what DOE will do. Mr. Lubliner stated that would be a stalling tactic.

Mr. Weinert called the question. Motion seconded, carried unanimously.

Mr. Zieman moved that the recommendation by the Subcommittee be accepted; motion seconded. Motion failed 5 affirmative, 8 opposed.

Mr. Zieman moved to reject Log 60; motion seconded. Motion carried 11 affirmative, 5 opposed.

Mr. Zieman moved that the Subcommittee recommendation to accept Log 62 be accepted. Motion seconded. Mr. Lubliner noted that the HUD has a directive that low income housing must be Energy Star. Ms. Defosses again stated that the consumer should decide, not have it dictated by the MHCC. Mr. Weinert stated that this is an important issue, we should regulate for the future. Mr. Zieman noted that this proposal is different than the previous one on appliances. There was a discussion of the requirements to meet the Energy Star program, noting that there are tradeoffs in the program. It was noted that in an earlier discussion concern was raised about affordability. The motion failed to pass on an 8 – 8 vote.

Mr. Braun moved that the proposal be rejected; motion seconded. Motion carried, 9 affirmative, 6 opposed.

Mr. Matchneer stated that HUD has developed a proposal on CO detectors. Mr. Mendlen distributed draft proposed language for a new section 3280.211, Carbon Monoxide Detection Requirements. The draft was amended to read "A carbon monoxide alarm(s) or detector(s) must be installed according to the *Standard for the Installation of Carbon Monoxide Warning Equipment, NFPA 720-2005* edition and in accordance with the installation instructions that accompany the unit. Each carbon monoxide alarm or detector installed must be listed and conform to the requirements of *Single and Multiple Station Carbon Monoxide Alarms, ANSI/UL 2034-2005*. The draft was further amended to change the date of NFPA 720 to the 2009 edition.

Mr. Zieman asked what should be done for homes installed in basements. Mr. Mendlen indicated that should be handled with an amendment to the Installation Standard. Mr. Zieman stated that the requirement be modeled after 3280.208(b) (2).

It was moved, seconded, and carried that the revised draft language for new 3280.211 be adopted.

13. Ms Brenton announced that the meeting is being held open to be continued by conference call on August 7, 2009 at 10:00 AM and August 20, 2009 at 11:00 AM for the purpose of completing the work of the agenda. The agenda item(s) from this agenda to be covered at the continuation of this meeting are further discussion of the draft PIA rule.

Mr. Matchneer reported that Mr. Everett was working on Subcommittee assignments with GSA.

A call for volunteers will be distributed to review the reference standards.

The Committee recessed until 10:00 AM, August 7, 2009

Friday, August 7, 2009.

The Committee reconvened by conference call at 10:00 AM

14. Ms. Brenton called the call to order. Mr. Toner called the roll; a quorum was present. HUD and guests introduced themselves.

Mr. Gorman thanked Mr. Roberts for the work he had done in identifying policy issues in the draft PIA rule.

Mr. Ghorbani asked whether the individual votes taken required 2/3 majority to pass or whether the votes were a straw poll, and, if the later there would be a vote at the end of the review that required a 2/3 majority. Ms. Brenton stated that the individual votes were straw votes and that there would be a written ballot at the end.

15. Ms. Brenton continued the review of the draft PIA rule.

3282.360 Mr. Zieman stated that this requirement is “over-the-top”. It would require a DAPIA to go to UL, for example, and evaluate its test equipment and personnel. Mr. Luttich recommended that the paragraph be deleted. Mr. Walter asked if the DAPIA did not do this, who would. Mr. Zieman noted that most labs are accredited by independent agencies to ISO or other standards. Mr. Walter asked if HUD accepted accredited laboratories; it does. Mr. Zieman moved that the paragraph be replaced with the language in the original 3282 document. Mr. Long agreed. Motion seconded and carried.

3282.361(a)(1) It was noted that “responsible to HUD’ is superfluous; the entire program is responsible to HUD. Mr. Jewell stated that it served to emphasize the point. Mr. Weiss noted that a DAPIA was subject to disciplinary action by HUD for failure to perform. It was moved, seconded and carried that “responsible to HUD” be deleted; Jewell opposed, Zieman abstaining.

There was a discussion of whether a home that exceeds the model installation standards would “conform”. It was moved, seconded and carried that “conform” be changed to “are equal to or exceed”.

3282.361(a)(2) Mr. Stamer questioned whether an IPIA could reject a design or quality assurance manual approved by a DAPIA. Mr. Zieman stated that an IPIA has no choice if it believes it violates the Construction and Safety Standards. Mr. Jewell noted that it is a safeguard against the DAPIA becoming too close to the manufacturer. Mr. Zieman noted that if the IPIA and DAPIA cannot come to an agreement, they can go to HUD. Mr. Jewell asked if there were an appeals process. Mr. Lagano noted that going to HUD is the appeals process. Mr. Zieman questioned whether “knows or has reason to know” is appropriate in this instance. Mr. Matchneer stated that it is a “legal test of knowledge”.

3282.361(a)(3) It was noted that this paragraph was unnecessary. It was moved, seconded and carried that it be deleted.

3282.361(b)(1)(ii) Mr. Stamer asked why the last paragraph of the original draft proposal had been deleted. Mr. Matchneer noted that the AC rule covers it. Mr. Roberts asked whether the paragraph allows the “equal or exceed” provision. Mr. Matchneer indicated that it did. The paragraph was restored.

3282.61(b)(3) Mr. Zieman noted that the last two sentences are new requirements. He questioned why a report must be issued on new designs that are to be corrected. Mr. Luttich noted that it should only apply to post-approval cases. Mr. Long recommended that the sentences be deleted. Mr. Zieman noted that even if the requirement was rewritten the required report is of no benefit. Mr. Luttich noted that there would be no reason to notify the IPIAs. Mr. Mendlen stated that notification would be required for previously approved designs. Mr. Walter

noted that the original 3282.361 only applied to new designs prior to being built. Mr. Walter recommended that paragraph 3282.361(a) be clarified that it applied to new designs and that 3282.361(b) applied to existing. Mr. Zieman recommended that the paragraph be rewritten and create new sections. Mr. Matchneer stated that there is not sufficient time to draft new language and circulate it to the MHCC for review.

It was moved, seconded and carried that the last two sentences be deleted and that the MHCC comment on the need to clarify the section.

3282.361(c)(2) Mr. Zieman asked what “coordination” is expected. Mr. Matchneer stated that coordination is a general principle to be emphasized. Mr. Weiss stated that it duplicates the responsibilities in 3282.364. Mr. Walter moved that the sentence be moved to a new 3282.361(c)(5). A friendly amendment made it a new 3282.361(d). Amended motion seconded and carried, 8 affirmative, 7 opposed.

3282.362(a)(1)(iv) Mr. Nebbia noted that “red tags” is used as a verb. It was OK. Mr. Stamer noted that it is the responsibility of the manufacturer to correct the problem(s).

3282.362(b)(1) There was a discussion of the issuance of labels. HUD is to reword the paragraph.

3282.362(b)(1)(ii) The term “checklist” was questioned; is it a “traveler”. “Traveler” has been deleted. “checklist” changed to “description of required inspections and tests”.

3282.362(b)(1)(v)(E) Deleted, management responsibility

3282.362(b)(2) First sentence was changed to “qualified personnel”, rest of sentence deleted.

3282.362(b)(3) Mr. Stamer asked what the process is for a brand new plant. Mr. Pethel indicated that the IPIA, manufacturer and the DAPIA should work it out. The “two to four week’s supply of” was deleted.

3282.362(b)(4) Mr. Stamer expressed a concern about a “late response” by HUD. Mr. Matchneer stated that it is not normal to put a time limit on action by the Secretary in a regulation, only Congress can do that. Mr. Stamer noted that a delayed response, if it involves corrective action, adds cost and delay to the consumer. Mr. Ghorbani questioned why this is necessary, especially if it adds cost to the consumer. Mr. Weiss suggested adding “within a reasonable time”.

3282.362(b)(5) Moved to end of 3282.362(b)(4)

3282.362(b)(6) A time limit of 5 years was added.

16. Ms. Brenton stated that the discussion on the draft PIA will be continued by conference call at 11:00 AM, August 20, 2009 start at 3282.362(b)(8)

Mr. Zieman asked if the CO issue could be brought back for discussion. Ms. Brenton indicated that it could be discussed on the conference call on the 20th.

The call concluded at 1:00 pm.

Thursday, August 20, 2009.

The Committee reconvened by conference call at 11:00 AM

17. Ms. Brenton called the call to order. Mr. Solomon called the roll; a quorum was present. HUD and guests introduced themselves.

It was moved and seconded that the CO detector issue be returned to the Subcommittee. Mr. Walter supported the action. It was felt that additional work on the language and placement is needed. Mr. Weinert asked if this is a carryover from the face-to-face meeting. Mr. Jewell noted that at the face-to-face meeting it was agreed that the requirement should be placed in the Installation Standard. Mr. Berger stated that the issue is being beat to death. All the issues were discussed at the Subcommittee. Mr. Weinert noted that the placement was handled the same way as smoke detectors. Mr. Berger stated that the Subcommittee had made the recommendation for the requirement. Mr. Walter noted that there was question about the power source. Mr. Weinert noted that the regulation does not address power. It allows flexibility. A motion to call the question was seconded and passed unanimously. The motion to return the question to the Subcommittee failed, 5 affirmative – 8 opposed.

18. Ms. Brenton resumed the review of the draft PIA rule. Mr. Weiss asked if the Committee's review would be subject to a letter ballot. Mr. Solomon cautioned that the due date for comments is September 8th.

Mr. Nebbia noted that HUD was to reword 3282.362(b)(1). Mr. Luttich noted there is a question about completion of the certification. Mr. Matchneer noted that the labels are under the control of the IPIA. The prior decision to let HUD reword the paragraph was confirmed.

3282.362(c)(1) Mr. Weinert noted that this is a long section. He recommended that HUD look at how it could be broken up. He also recommended that "plant" be changed to "facility" throughout the document. Both recommendations accepted.

3282.362(c)(2) "repeatedly" fail was changed to fail "during multiple inspections". There was a discussion of the need to inform HUD when the IPIA increases the frequency of inspections. Mr. Matchneer noted HUD should know that a facility is subject to increased surveillance as it is an indication of a problem. HUD does not need to be consulted regarding corrective actions, just informed. The 3 day notification was changed to 3 business days. Mr. Weinert stated that HUD should also be notified prior to the IPIA returning to normal frequency of inspections – notification also to be 3 business days. This is to ensure that there are no other issues involved. It was moved, seconded and carried that the changes be made. It was recommended that this section be split into two sections – one on increased inspections, one on removal of labels.

3282.362(c)(3)(i)(E) There was a discussion of when labels are to be replaced and by whom. The paragraph was edited.

3282.362(c)(3)(ii)(C) Mr. Zieman stated that this only applies to private IPIAs. Mr. Luttich noted that he frequently gets requests in refinancing cases. Paragraph (C) and (D) were combined. Records are to be kept for 5 years. Mr. Luttich noted that there are 2 options – maintain the records or send them to HUD.

3282.362(c)(3)(ii)(F) There was a discussion of the two to four week supply of labels. Mr. Weinert stated that the manufacturer and IPIA should be able to agree on a supply. It was moved, seconded and carried that the amount be agreed between manufacturer and IPIA.

3282.362(c)(3)(ii)(G) Noted that the provision only applies to homes not sold.

3282.362(c)(4) Ms. Defosses asked whether a minor defect should be red tagged. Yes, it should be corrected.

19. Ms. Brenton stated that the discussion on the draft PIA will be continued by conference call at 11:00 AM, August 27, 2009 starting at 3282.362(c)(4).

The call recessed at 2:05 PM.

Thursday, August 27, 2009

The Committee reconvened by conference call at 11:00 AM

20. Ms. Brenton called the call to order. Mr. Solomon called the roll; a quorum was present. HUD and guests introduced themselves. Ms. Brenton resumed the discussion of the draft PIA rule at 3282.362(c)(4).

3282.362(c)(5) The HUD label number was added to the information to be on the data plate.

3282.362(d) Added records to be kept for a 5 year period.

3282.363 The right to inspect was limited to 'within reasonable time limits and in a reasonable manner'.

3282.364 Reports of drawings of imminent safety hazards and failure to conform should be sent to all facilities using the design.

3282.365 To be deleted – HUD administrative function

3282.366 The responsibilities of the IPIA, DAPIA and manufacturer were discussed. Ms. Nelson noted that as a consumer she wanted all three involved in identifying a class. Mr. Roberts noted that the PIAs are only responsible for reviewing the manufacturer's method for identifying a class. Mr. Vogt concurred. After further discussion it was determined that 3282.366(b) and (c) were not necessary.

3282.451 It was noted that an SAA must have an approved state plan.

3282.453 Mr. Stamer asked what the qualifications are for monitoring. Mr. Weinert noted that they must meet the requirements of ASTM E541, *Standard Specification for Agencies Engaged in System Analysis and Compliance Assurance for Manufactured Building*. It was suggested that HUD require certification of PIAs in lieu of ASTM E541. Mr. Stamer stated that the document makes IPIAs "super powers" in the plant. Mr. Weinert recommended that the topic be put on the Committee work item log. It was noted that the SAA was monitoring in lieu of the monitoring contractor, not duplicating monitoring.

21. Ms. Brenton stated that the discussion on the draft PIA will be continued by conference call at 11:00 AM, September 1, 2009 starting at 3282.453.

The call recessed at 2:00 PM.

Tuesday, September 1, 2009

The Committee reconvened by conference call at 11:00 AM

22. Ms. Brenton called the call to order. Mr. Solomon called the roll; a quorum was present. HUD and guests introduced themselves.

Ms. Brenton noted that the bylaws state that there be a two week period for letter ballots followed by a circulation period of two weeks. Mr. Solomon explained the voting period in the

bylaws. He also noted that the revised document is almost 2/3 complete has been distributed so the Committee has a head start on reviewing the final. Mr. Ghorbani asked whether HUD would agree to an extension of the comment period for the letter ballot. Mr. Matchneer suggested a one week ballot. Mr. Farish stated he likes to see the recirculation of the results of the initial ballot because it allows one to review the comments on the ballot. Mr. Solomon explained the voting options. He noted that except for an affirmative vote, all other votes must be accompanied with a comment or reason. Mr. Roberts noted that the MHCC's comments need a 2/3 majority to go forward.

23. Ms. Brenton resumed the discussion of the draft PIA rule at 3282.453.

3282.453 It was noted the MHIA 2000 gives the states authority under an approved state plan.

Ms. Defosses moved that paragraphs (a)(1), (a)(2), (a)(4) and (b)(1), (b)(2), and (b)(G) be deleted. Motion seconded and carried.

3282.453(b)(4) At the end of the paragraph, sending copies to all monitoring personnel was deleted.

3282.454 It was noted that there should be a time limit on when reports are distributed to affected PIAs. Mr. Matchneer noted that regulations do not normally impose time restraints on the Secretary. 180 days was agreed upon.

3282.551 Mr. Weiss recommended that the second sentence be deleted as unnecessary. Mr. Weinert stated that it serves as a red flag. Motion to delete was seconded and carried with Messrs. Weinert and Zieman opposed.

3282.552(a) Mr. Zieman noted that it is not clear whether this paragraph applies to a labeled house or one in construction. It is for a house that has shipped. First sentence deleted. "Immediately" was changed to 5 days.

3282.552(b) Paragraph clarified to indicate it did not apply to homes under a Section 404 notification. "Immediately" was changed to 5 days.

3282.552(c) "Manufacturer" in second sentence changed to "retailer", mistake.

3282.553(a) It was noted that Subpart M is not yet in effect. Mr. Matchneer stated that it would be by the time this rule is published.

3282.553(b) It was questioned whether all this information was necessary. Mr. Wade noted that some of this is already reported to HUD and it is an unnecessary cost to repeat it. Paragraph (1) was deleted. Paragraph (3) was deleted Ms. Defosses moved that (4) –(7) be deleted. Seconded and carried.

3282.553(c) Mr. Weinert moved that paragraph (1) be deleted; seconded and carried. Mr. Zieman moved that paragraph (2) be deleted; Mr. Roberts stated that this is already reported. Motion seconded and carried. Mr. Zieman moved that paragraph (3) be deleted.

3282.553(d) Mr. Weinert noted that this is being done now. He questioned whether the report is necessary. Mr. Zieman stated that the report is being sent to the SAA, not to HUD.

24. Mr. Nebbia asked what form the Committee wished to receive the document(s), redlined or with comments. Mr. Walter recommended a strikeout/underlined version.

Mr. Ghorbani asked what should be done now as this is not a complete package. Ms. Brenton indicated that the Committee could address the policy issues or submit the policy issues with comments. Mr. Matchneer stated that it would be easier for HUD if it were provided with a strikeout/underlined version of the original draft. Mr. Walter indicated that he would vote affirmative with comments as he felt it was in the public interest to send the Committee document to HUD. Mr. Ghorbani stated that here is another approach – reject the draft as incomplete and requesting that HUD come back with a more detailed proposal. Ms. Nelson indicated that she agreed with Mr. Walter.

Ms. Nelson asked what would happen if the ballot does not receive the 2/3 majority. If the vote is to reject as incomplete, the Committee must provide some comments to HUD. Ms. Defosses noted that if the law requires justification and cost for a regulation, then without it, the package is incomplete. Ms. Brenton indicated that there have been different interpretations of the law between HUD and some members of the Committee. Mr. Matchneer noted that if the draft is rejected then the process just gone through has been wasted. He stated that the cost and justification will be included in the published proposed rule for comment. Ms. Defosses stated that, even though the Committee accepted proposals without cost and justification in the past, in these tough economic times it may be time to change. Mr. Ghorbani noted that there is a new Administration that is watching closely. Mr. Weiss noted that section 604(e)(4) of the MHIA 2000 requires the MHCC to shall consider the probable effect of standards on the cost of manufactured homes to the public. He stated that such information is necessary when considering proposals.

Ms. Brenton noted that in most cases HUD has presented proposals to the Committee without the 120 day response time limit. Mr. Roberts noted that Section 604(b)(3)(A)(i) contains the 120-day limit for MHCC to comment. Mr. Zieman noted that although the Committee has to consider cost, it does not require HUD to provide cost data.

Mr. Walter recommended that members vote affirmative with comment. Mr. Berger asked whether HUD will publish the proposed rule and include the MHCC comments. Mr. Matchneer stated that has been the intention all along. Mr. Ghorbani stated that the draft proposed rule should be sent back. Ms. Nelson noted that she will be attending a national homeowners meeting in Seattle where homeowners from at least 30 states will be attending. She could raise issues for discussion and feedback if she had sufficient accurate information. Mr. Berger noted that as consumer representatives, they should not be making decisions without cost impact information. Mr. Weinert noted that he does not want to limit discussion on cost, but the Committee has no cost information to discuss.

Mr. Matchneer stated that, based on the MHCC discussions on the draft proposed rule over the last several months, the final proposed rule will have changed and the cost estimates will be different from what might have been estimated for the draft. He noted that the Committee strikeout/underline version will be published along with the final proposed rule and its associated costs. Ms. Brenton asked if the final proposed rule will be circulated to the Committee for 120-day comment period.

Ms. Nelson asked if we don't move forward do we stop here. She moved that the MHCC should vote to accept or reject the entire document. Mr. Solomon explained the possible voting options - Affirmative, Affirmative with comment, Negative, or Abstain. The latter two votes require an

explanation. Mr. Solomon stated that the record will reflect all the MHCC comments. Mr. Matchneer indicated that the preamble will include a discussion of and reasons for acceptance or rejection of the comments. Mr. Ghorbani noted that a 2/3 majority is needed to approve submission to HUD. Ms. Nelson noted that the proposal will not stop with a failed vote. HUD eventually will publish a proposed rule. Mr. Weinert called the question. Motion seconded and carried without objection. It was moved, seconded and carried, without objection, that the MHCC revised draft proposed PIA rule be submitted to the MHCC for a letter ballot. Ballot to include the strikeout/underlined document and the policy issues. Mr. Solomon reviewed the timing of the ballot, the recirculation ballot and submission to HUD. Ms. Defosses asked what the purpose of the second ballot is. Mr. Solomon stated that the ANSI procedures require the recirculation so that everyone can see what comments were made and could change their vote if persuaded to do so by the comments. The MHIA 2000 requires the MHCC to follow the ANSI procedures. Ms. Brenton asked Mr. Matchneer if the timing was acceptable. He indicated that it is.

25. The call and the continuation of the July 28 – 30, 2009 MHCC meeting concluded at 2:00 PM. The Committee adjourned.

HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE

**July 28-30, 2009
Holiday Inn Arlington
Arlington, VA**

STATUS: M=MEMBER; NVM=NON VOTING MEMBER; AO= Administering Organization; SEC=SECRETARY

NAME	STATUS	ORGANIZATION	Tuesday July 28 th	Wednesday July 29 th	Thursday July 30 th
Susan Brenton - <i>Chair</i>	M	MHCA	X	X	X
William J. Lagano - <i>Vice Chair</i>	M	Commonwealth Consulting Corp.	X	X	X
Pat Toner	SEC/AO	NFPA	X	X	X
Jack D. Berger	M	Consultant; Berger Construction			
Karl Braun	M	NAMH – MHOAA	X	X	X
Theresa Desfosses	M	State Manufactured Homes, Inc	X	X	X
William Farish	M	Clayton Homes			
Danny Ghorbani	M	MHARR	X	X	X
Doug Gorman	M	Home – Mart, Inc.	X	X	X
Kevin Jewell	M	Texas Low-Income Housing Information Service	X	X	X
Michael Lubliner	M	Washington State University /Energy	X	X	X
Mark Luttich	M	NE Public Service Commission, Housing & Recreational Vehicle Dept.	X	X	X
Terry Nelson	M	MHOA OF IL	X	X	X
Timothy Sheahan	M	GSMOL/V.P. MHOAA	X	X	X
William Stamer	M	Champion Enterprises	X	X	X
Randy E. Vogt	M	Minnesota Dept. of Labor & Industry	X	X	X
Michael Wade	M	Cavalier Home Builders, Inc.	X	X	X
Frank Walter	M	Consulting Civil Engineer	X	X	X
Richard Weinert	M	State of California	X	X	X
Mike Zieman	M	RADCO	X	X	X
William W. Matchneer	DFO	HUD	X	X	X
Robert Solomon	AO	NFPA	X	X	X

HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE

GUEST ATTENDANCE

**July 28-30, 2009
Holiday Inn
Arlington, VA**

NAME	COMPANY
Aguolu, Ujo	HUD
Brown, Adrian C.	HUD
Carpio, Daniel	HUD
Colsen, Kirsten Ivey-	HUD/OGC
Cooney, Brian	MHI
Danner, Pamela	Danner & Associates
Early, Chris	U.S. Department of Energy
Everett, James	HUD
Ferrante, Vic	HUD
Goswami, Ashok	IBTS
Hoyt, Gregory	HUD
Kritikos, Effie	HUD- OGC
Long, Thayer	MHI
McDuffie, Patricia	HUD
Mendlen, Richard	HUD
Nebbia, Joe	Newport Partners, LLC
Pethel, Lane	HUD
Podzius, Kasey	HUD/OGC
Postiglione, Amanda	HUD/OGC
Race, Peter	HUD - OGC
Rodgers, Thomas Lynn	Life Save
Waechter, George	Minute Man Products
Wallace, Angelo	HUD
Wing, Rob	HUD/FHA
Weiss, Mark	MHARR

ATTACHMENT D
MINUTES
MARCH 23, 2010 CONFERENCE CALL



Draft minutes
HUD Manufactured Housing Consensus Committee
Conference Call
March 23, 2010

1. Chairwoman Brenton called the meeting to order at 11:00 a.m. Mr. Solomon called the roll; a quorum was present. Mr. Solomon checked for guests. Mr. Matchneer introduced HUD staff on the call. He welcomed the new members on the Committee.

Mr. Matchneer noted that he was pleased that the next meeting would be held in Tulsa in conjunction with The Great Southwest Home Show. He had the opportunity to visit the show last year with Mr. Gorman and found it a great experience. He hopes members will find it so too.

2. Mr. Matchneer noted that the purpose of this call is to obtain MHCC feedback on the draft Enforcement Regulation concerning the scope and applicability of HUD's regulations for Recreational Vehicles (RVs) and Recreational Park Trailers. He noted that the Recreational Vehicle Industry Association (RVIA) and the Recreational Park Trailer Industry Association, Inc. (RPTIA) had come to HUD to discuss the exemption for recreational vehicles in 24CFR3282.8(g) and to consider a re-write. HUD has done that with the intent not to change it but to clarify it based on information now available, particular regarding park trailers. Mr. Matchneer noted that this is an enforcement issue for HUD.

Mr. Weinert asked whether the Committee should develop an overall comment on the draft or line-by-line comments.

3. Chairwoman Brenton asked if there were any public comments. Mr. Weiss stated that he had an overall comment and then specific comments on the draft. He asked if he could provide his specific comments during discussion of the draft. Ms. Brenton indicated that he could.

Mr. Weiss stated that, overall, MHARR was not in favor of the draft. It could present a consumer protection issue by creating a loophole, particularly for larger RVs and park trailers. He noted that Congress created a partial definition and the issue should be resolved by Congress. Mr. Weinert indicated that it creates a statutory issue for states. When a unit is resold a consumer can have a problem with registration. Messrs. Lagano and

Gorman concurred. Ms. Brenton noted that, in Arizona, people have changed the title for the unit to indicate that it is a manufactured home.

4. Mr. Weinert noted that there is also a safety issue when there is a loft area which has been designated for storage. It can be used as a habitable space that does not meet the requirements for egress, light, smoke detectors and other fire safety provisions.

Mr. Luttich noted that there are two sections in the draft, recreational vehicles and recreational park trailers, and they should be discussed separately. Mr. Santana concurred. Mr. Weiss noted that the draft section on recreational park trailers is a totally new section.

Mr. Weinert stated that the loft issue only pertains to park trailers. Mr. Garpow stated that the ANSI standard includes loft floor space with a ceiling height greater than 5 feet in the square foot calculation for the unit. RPTIA does not want to change it. The loft should have all the requisite safety provisions as the main floor if it exceeds 60" in height at any point. He stated that 400 square feet is a good limitation. Mr. Weiss expressed a concern that consumers might be encouraged to use the units as residences.

5. Mr. Weinert moved that section (g)(1)(i) and (ii)(A)-(D) be rejected, Mr. Lagano seconded. He stated that the provisions are not in the best interests of the states that regulate RVs. Mr. Matchneer noted that the Committee is being asked to provide comments on the draft. Mr. Berger noted that the comment would be that the section not be adopted.

Mr. Lagano asked why do a line-by-line if in the end the Committee concludes the draft should be rejected. Mr. Farish noted in that case the Committee comment would be to reject the draft. Mr. Walter moved, Mr. Stammer seconding, that Mr. Weinert's motion be tabled until a line-by-line review was done. Motion to table carried.

6. Mr. Santana asked what was the rationale for the 400 square feet threshold on RVs. Mr. Matchneer indicated that Congress established the limitation and if it were to be changed Congress should make the change. Mr. Weiss expressed a concern about cluttering up a regulation with a bunch of exemptions. He noted that the RV exemption has long been established, the park trailer exemption is new. Adding an additional exemption could lead to an endless process of considering exemptions.
7. Mr. Walter recommended that the first sentence in (g)(1) be changed back to the current language in (g)(1), e.g., delete "the Act" and replace with "this part, part 3280, or part 3283". Mr. Weiss stated that the Act specifically excludes self-propelled units and does not address non-self-propelled RVs. By not addressing non-self-propelled units the implication is that they are

covered. He noted the issue is complicated because there is no definition of permanent dwelling.

Mr. Luttich noted that 3280 defines a manufactured home as greater than 320 square foot and the exemption for recreational vehicles is 400 square feet or less. It was noted that (g)(2)(ii) pertains to the gap between those two criteria.

Mr. Lubliner recommended that “built on a single chassis” be inserted in (g)(1)(ii)(D).

It was recommended that the latest date of the ANSI standards be used.

Mr. Weinert expressed a concern over conflicts with DOT regulations regarding size.

Mr. Walter recommended that both the existing single chassis requirement and the 400 square feet limitation be retained.

8. Mr. Santana noted that if we were going to recommend that several of the existing (g) be retained why not reject the draft. He noted that paragraph (1) pertains to RVs, paragraph (2), which is new, provides an exemption for recreational park trailers that meet the criteria of (2). He moved that the Committee discuss the overall concepts in each section. Mr. Jewell noted that it is helpful to have a line-by-line discussion. Ms. Nelson noted that it is helpful to have a discussion of the big picture before doing the line-by-line.

Motion seconded and carried.

9. Ms Brenton asked whether the 400 square feet limitation should be retained. Mr. Luttich asked why there should be a 400 square feet limit if the unit was on a single chassis. He indicated that he was not in favor of the limitation. Mr. Matchneer indicated HUD did not want to encourage units greater than 400 square feet as they could be used as a dwelling.

Mr. Berger expressed a concern that the Committee was just rearranging the draft. Mr. Weiss noted that the draft is attempting to define an RV as “not a dwelling” without defining “dwelling”

Mr. Walter moved, Ms. Nelson seconding, that “built on a single chassis” be inserted in (g)(1)(ii)(A) and “less than 400 square feet” be inserted in (g)(1)(ii)(B). He noted that Congress had already dealt with self-propelled units. HUD has to deal with non-self-propelled units. Mr. Farish stated that this is making a bad proposal worse. Mr. Berger noted that reasons must be given for negative comments. Ms. Brenton suggested that current (g) could be left as-is and a new (h) be added for park trailers. Mr. Luttich

recommended deleting the 400 square feet limitation. Mr. Tampos questioned deletion of the 400 square feet limit as not having any benefit to manufactured housing. Mr. Lubliner stated that he had talked to his state IPIA who didn't want units greater than 400 square feet exempt. He noted that as the units get larger people are more likely to live in them. Mr. King noted that there currently is a problem with slideouts. He stated that since Congress created the size limitation, it should make any change. Mr. Walter reiterated his motion.

After further discussion the motion was voted on and carried.

10. Mr. King asked why (g)(1)(ii)(C) is needed if the vehicles are regulated by the National Highway Traffic Safety Administration. Mr. Walter moved, Mr. King seconding, that (g)(1)(ii)(C) be deleted. Motion carried.
11. Mr. Santana stated that (g)(2) was good as drafted. Mr. Weinert questioned the need for the "between 320 and 400 square feet" qualifier, and whether the ceiling height restriction applies if there is a second and third level. Mr. Garbow stated that RPTIA requires all space, including any space that is added-on, be included in the 400 square feet calculation.
12. Mr. Walter moved that (g)(2)(v) be deleted as units built prior to the ANSI standard might not comply and therefore be subject to HUD construction and safety standards. Mr. Garbow indicated that he was in favor of retaining the requirement. He did note that RPTIA membership requires manufacturers to certify that they comply with the ANSI standard. He noted that the requirement is monitored by third-party inspections. RPTIA members build 90% of the park trailers in the U.S.

Motion seconded and carried (2 negatives).

13. Mr. Walter moved that "Between 320 and" be deleted from (g)(2)(ii) to simplify the statement. Mr. Matchneer noted that HUD has a 320 square feet statutory floor. A unit less than 320 square feet is not subject to HUD regulation. Mr. King noted that in NY people are asking for approval of units that are 400 square feet with an 8' – 10' porch. Mr. Matchneer stated that porches are not included. Mr. Weinert noted that eventually people would enclose the porch. Ms. Brenton and Mr. Lubliner noted that they have seen this. Mr. Santana noted that HUD is defining a unit between 320 and 400 square feet as a park trailer.

Motion seconded and carried.

14. Mr. Weinert again expressed a concern the with the 5 feet ceiling height threshold; all habitable space should be counted. Mr. Luttich noted that many building codes have such a threshold. Mr. Garbow noted that RPTIA counts

all space with a ceiling height greater than 5 ft. Mr. King noted that Mennonite storage sheds are beginning to be expanded.

15. Ms. Brenton asked whether there are any additional or overall comments that should be made. The earlier tabled motion was taken off the table. Mr. Weinert withdrew the motion; Mr. Lagano concurred.

Ms. Brenton summarized the comments thus far:

- the 400 square ft or less threshold for exempt RVs should be retained as a new (g)(1)(ii)(A);
- non-self-propelled RVs should be built on a single chassis; (g)(1)(ii)(C) should be deleted;
- "Between 320 and" in (g)(2)(ii) should be deleted;
- the references to the ANSI standards should be reconsidered and perhaps deleted. Regarding the latter if the standard are retained the latest edition should be referenced; if the reference in (g)(2)(v) is deleted, (g)(2)(iv) should also be deleted as there would be not reference standard to certify to.

16. Mr. Solomon was directed to put the recommendations in writing and submit them to HUD on behalf of the MHCC.

17. The call concluded at 1:35 pm

**HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
ATTENDANCE SHEET
CONFERENCE CALL
Tuesday, March 23, 2010**

STATUS: M=MEMBER; NVM=NON VOTING MEMBER; AO= ADMINISTERING ORGANIZATION
SEC=SECRETARY

NAME	STATUS	ORGANIZATION	Attendance	
			Yes	No
Berger, Jack	M	Berger Reconstruction	X	
Braun, Karl	M	NAMH – MHOAA	X	
Brenton, Susan	M	MHCA	X	
Desfosses, Theresa	M	ME Manufactured Homes		X
Farish, William	M	Fleetwood Homes	X	
Gorman, Doug	M	Home-Mart, Inc.	X	
Jewell, Kevin	M	TX Low-Income Housing Info Service	X	
King, Timothy	M	NY State Department	X	
Lagano, William J.	M	Commonwealth Consulting	X	
Lubliner, Michael	M	WAU Energy Program	X	
Luttich, Mark	M	NB SAA	X	
Matchneer, William	NVM	HUD	X	
Mazz, Mark	M	Architect		X
Nelson, Terry	M	MHOA OF IL	X	
Santana, Manuel	M	GSMOL/MHOAA	X	
Scott, Gregory	M	Scotbilt Homes		X
Solomon, Robert	AO	NFPA	X	
Stamer, William	M	Champion Homes	X	
Toner, Pat	AO/SEC	NFPA	X	
Wade, Michael	M	Cavalier Home Builders, Inc.	X	
Walter, Frank	M	Consultant	X	
Weinert, Richard	M	State of CA	X	

**HUD MANUFACTURED HOUSING CONSENSUS COMMITTEE
CONFERENCE CALL
Tuesday, March 23, 2010**

GUEST ATTENDANCE SHEET

NAME	ORGANIZATION	ATTENDANCE
Everett, James	HUD	X
Mendlen, Rick	HUD	X
Pethel, Lane	HUD	X
Podzius, Casey	HUD	X
Race, Peter	HUD	X
Ziegler, Cheryl	HUD	X
Folk, Jim	Forest River	X
Garpow, Bill	RPTIA	X
Grissom, John	Grissom Report	X
Long, Thayer	MHI	X
Neiblinger, Mike	Skyline	X
Starkey, Lois	MHI	X
Weiss, Mark	MHARR	X

ATTACHMENT E
PROPOSALS
SPRINKLERS

4-6-2010

24 CFR Part 3280

Manufactured Home Construction and Safety Standards

§3280.210 Fire Sprinkler System Requirements.

(a) When a manufacturer elects to install a fire sprinkler system or a state or local authority having jurisdiction requires that a fire sprinkler system be installed for all detached single family dwellings and manufactured homes, this section establishes the requirements for the installation of a fire sprinkler system in a manufacturer home.

(b) Each fire sprinkler installed in a manufactured home must be designed, installed, and tested in accordance with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition.

(c) The manufacturer must permanently affix a Fire Sprinkler System Certificate adjacent to the data plate. The manufacturer must specify on the Certificate, the minimum required pressure in pounds per square inch (psi) and flow rate in gallons per minute (gpm) for the water supply system. The Certificate is to read as follows:

FIRE SPRINKLER SYSTEM CERTIFICATE

Note: This label contains important information about the fire sprinkler system installed in this structure.
Homeowner: Do not remove, alter, or cover this label.

GENERAL INFORMATION:

- (1) Name and address of home manufacturer: _____

 Manufactured home serial number: _____
- (2) Name and address of fire sprinkler system installer (factory) installation if different from the home manufacturer: _____

 Date of factory installation: _____

The residential fire sprinkler system installed in this dwelling is in compliance with NFPA 13D *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition*. This system has been verified through hydraulic analysis based on the operating characteristics of the specific components utilized. **Note:** The manufactured home installer must complete testing required by NFPA 13D at the home site.

Warning: When necessary, replace components only with identical components or those determined to have equivalent performance characteristics with respect to flows and pressures.

SPRINKLERS INSTALLED IN THIS STRUCTURE

Manufacturer	Model	Year	Temp. (°F)	Design Coverage	Required Flow Rate	Location
1. _____	_____	_____	_____	ft x ft	gpm @ psi	_____
2. _____	_____	_____	_____	ft x ft	gpm @ psi	_____
3. _____	_____	_____	_____	ft x ft	gpm @ psi	_____

MINIMUM WATER SUPPLY REQUIRED

Warning: For this system to operate properly, the following minimum supply of water must be available at the point of connection to the residential fire sprinkler system:

_____ gpm @ not less than _____ psi for not less than _____ minutes

The fire sprinkler system has been completed on site in accordance with the home manufacturer's installation instructions, and the above listed required water supply is available.

Name and address of site installer: _____ Date: _____

CONTROL VALUES

Warning: This structure contains a residential fire sprinkler system. Do not alter or make additions to the water supply without first contacting the home manufacturer.

The control valve(s) on the water supply to the residential fire sprinkler system must be in the **full open** position for the system to operate properly. If the valves must be closed temporarily to service the sprinkler, **notify local authorities having jurisdiction** and verify that they are **left fully open** and secured when service is complete.

(d) Manufacturer installation instructions must provide specific instructions for the inspection and testing of the fire sprinkler system during the installation of the home.

(e) The Manufacturer is to provide the following information in the consumer manual and the manufacturer's installation instructions describing the fire sprinkler system:

(i) Equipment and specifications.

(ii) Design information.

(iii) Operation.

(iv) Method and frequency of system testing.

(v) Proper fire sprinkler maintenance.

24 CFR Part 3285

Model Manufactured Home Installation Standards

§3285.4 Incorporation by reference (IBR).

* * * * *

(h)

* * *

(4) NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition.

* * * * *

§3285.603 Water supply.

(f) Testing procedures for factory installed fire sprinkler systems. Upon final connection at the home site of the fire sprinkler system to the water supply in accordance with the manufacturer's installation instructions, the adequacy of the water supply is to be verified and the system is to be tested in accordance with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition. The site installer must provide its company name and address along with the date on the Certificate required by 3280.210(c) of the Manufactured Home Construction and Safety Standards.

ATTACHMENT F
PROPOSALS
VENT EXHAUST OUTLETS

§ 3280.710(d) Venting, ventilation and combustion air.

* * * * *

(d) Venting systems must terminate at least three above and not less than ten feet from any motor-driven air intake discharging into habitable areas.

* * * * *

ATTACHMENT G
PROPOSALS
ENTERTAINMENT OUTLET
RECEPTACLES

§ 3280.806 Receptacle Outlets.

* * * * *

(e) Receptacle outlets must not be installed in or within reach (30 inches) of a shower or bathtub space. Countertop or cabinet spaces containing receptacle outlets which may be used for connection to an entertainment center, television, computer or other appliance must be located at least 30 inches in any horizontal direction from the tub surround or shower enclosure.

* * * * *

ATTACHMENT H
PROPOSALS
FIREPLACE VENTING/CRAWL SPACE
VENTILATION

§ 3280.709(g) Installation of Appliances.

* * * * *

(g) * * *

(1) * * *

(ii) A fireplace or fireplace stove, air intake assembly, hearth extension and chimney is to be installed in accordance with the terms of their listing and their manufacturer’s instructions. The manufacturer is not required to install but is to ship with each home containing a fireplace or fireplace stove, an adequate extension of the air intake assembly that will allow the combustion air inlet to pass through any site installed skirting to the outside of the home.

* * * * *

§3285.505 Crawlspace Ventilation.

* * * * *

(f) Exhaust air from dryer vents, downdraft ranges and or/cooktops must pass through skirting, if installed, to the outside. Combustion air for fuel burning appliances including fireplace and fireplace stoves is to be provided by:

(1) A combustion air inlet that passes through the skirting, if installed, to the outside of the manufactured home that is provided by the manufacturer (see 3280.709(g)(1)(ii)); or

(2) A vented crawl space when the total net free area of the ventilation openings to the outside is equivalent to not less than the twice the required combustion air opening for each installed fuel burning appliance; the entire crawl space is at least 18” in height and is unobstructed except for chassis members; and, the ventilation openings are not of the closeable type.

(g) Any surface water running off from the furnace, air conditioning or water heater drains must be directed away from under the home or collected by other means identified in §3285.203.

* * * * *

ATTACHMENT I
PROPOSALS
PROPOSED AMENDMENT
GROUND ANCHOR ASSEMBLY
TESTING PROTOCOL

**Proposed Amendments to the Ground Anchor Assembly Test Protocol
Recommended by the MHCC Ground Anchor Task Force**

Prepared for

U.S. Department of Housing and Urban Development
Washington DC

Prepared by

Jay H. Crandell, P.E.
Ares Consulting
West River, MD

Final Draft of Amendments

April 2010

Supporting Statement

Reason: A previous draft Ground Anchor Assembly Test Protocol (GAATP) was issued on August 12, 2005 by the MHCC Ground Anchor Task Force. Subsequently, HUD sponsored and has completed an extensive technical literature review and multi-site ground anchor testing study to verify and improve the draft GAATP. The study results are available as “Research and Analysis for Manufactured Housing Foundations: Ground Anchor Verification Testing”, http://www.huduser.org/portal/publications/destech/grnd_anchor_2d.html (including also supplemental reports). This amended GAATP implements the key findings and builds upon the previous work of the MHCC Ground Anchor Task Force. This amended GAATP is intended to fulfill the requirements for a “nationally recognized testing protocol” in accordance with 24 CFR Part 3285, Section 3285.402.

There are many benefits afforded and issues resolved by this amended draft GAATP toward establishing a nationally recognized standard test protocol for manufactured home ground anchor assemblies marketed today. These benefits include (and are similar to those reported for the prior August 12, 2005 draft):

- Many States are using different test protocols to certify ground anchors for installation of manufactured homes. The protocol would establish nationally recognized test protocol for universal acceptance of ground anchor assemblies in different soil classifications throughout the country.

- The test protocol establishes the ultimate_{anchor} load and load resistance design values (working_{anchor} load) to enable consistent and reliable anchor assembly selection.
- Ground anchor manufacturers will have a means of testing and listing their products via a nationally recognized testing laboratory or testing and certifying by a registered professional engineer following a consistent and reliable procedure.
- All ground anchor assemblies will be required to be field tested in properly evaluated and classified soils to ensure a reliable means of establishing anchor load resistance design values.
- The test protocol establishes that each ground anchor assembly be listed or certified for use in certain soil classifications, thus easing the burden in selecting assemblies for different soil classifications at installation sites throughout the country.
- Once a ground anchor assembly has established design values for a certain soil classification, it would only have to be retested if the assembly product specifications are changed.
- The test protocol provides three different standardized test methods to evaluate a ground anchor assembly based on its intended installation method (alternative configurations are also permissible with appropriate documentation).
- The GAATP requires manufacturers to provide installation instructions for each ground anchor assembly classified under the test protocol.
- This test protocol provides a level playing field for all ground anchor assembly suppliers, to have all assemblies listed or certified under one standard for the intended use.
- Ground anchor manufacturers will be required to test, certify or list, and label every ground anchor assembly used for the installation of manufactured homes.
- Typically, to determine a working_{anchor} load, industry is required to test only three anchors and average the results. This test protocol requires six anchors to be tested and the lowest test value is used to define anchor performance. The failure criteria are provided on a performance basis to ensure efficient and flexible use of ground anchors in conformance with the basis of design values used in 24 CFR Part 3285 for prescriptive anchorage installation requirements.
- Soil classifications will be required to establish design values for certification and listing of every ground anchor assembly. The soil classification will also need to be known at the installation site for installing the appropriately labeled ground anchor assembly. Furthermore, safety factors used to derive anchor load resistance design values from test results vary appropriately (risk consistently) in accordance with the robustness of the soil classification method used at the installation (end-use) site.

The key improvements in this amended GAATP are highlighted in the text (underlining and strike-out) and supplemented with comments to explain the rationale and purpose for the amendments to the prior draft GAATP. The amendments fall into two categories:

1. Editorial and formatting, or
2. Technical

The editorial amendments are primarily related to improving the clarity and “ease-of-use” of the GAATP. For example, Section 1.0 Scope includes a number of editorial revisions. Section 2.0 includes revisions to update referenced standards. Section 3.0 includes revisions to definitions to

improve clarity, provides additional definitions where necessary, and deletes definitions of terms that are not used in the GAATP. A new Section 4.0 is added as a “roadmap” for users of the GAATP and also is editorial in nature. In addition, several sections or subsections have been deleted or moved to remove redundancies in the prior GAATP format and to streamline requirements in the new format. These changes are noted with comments and underline/strike-out text where they occur in this amended draft GAATP.

Technical changes begin in Section 5.0 (previous Section 4.0) dealing with soil characterization. This is an area where studies have shown the greatest amount of uncertainty is created in reliably establishing anchor design values. Thus, the amendments are generally consistent with the intent of the earlier draft GAATP, but provide greater detail and direction for certification site soil characterization to ensure reliable use of anchor design values determined in accordance with the GAATP. Similarly, new Section 6.0 (previous Section 5.0) provides a greater level of guidance in testing apparatus configuration and measuring equipment requirements to ensure reliable and repeatable anchor testing results. These amendments are also considered to be consistent with the intent of the earlier draft GAATP. New Section 7.0 (previous Section 8.0) also is consistent with the earlier draft GAATP, but includes a number of editorial or formatting improvements as discussed previously. Technical changes to this section include improvements in anchor preloading and pretension and installation tolerances to ensure repeatable and consistent results. In Section 7.3, displacement rate requirements are added to ensure consistency of test results and to avoid problems associated with lack of displacement control (e.g., load-duration time effects that can alter results by as much as 20%). Finally, Section 8.0 (previous Section 9.0) provides a means of determining anchor design values on the basis of tested performance with use of safety factors that are consistent with three methods of end-use installation site soil characterization (which affects the reliability of anchor performance). There is one change in Section 9.0 Test Report (previous Section 10.0) to clarify that the ground anchor certification or listing information showing compliance with the GAATP and Part 3285.402 must be included with anchor packaging.

Appendix A in the previous draft GAATP has been modified editorially to include background information and guidance on three soil test methods: torque probe, standard penetration test, and dynamic cone penetrometer. A new Appendix B provides guidance on three methods of soil classification for end-use installation sites. These methods affect the magnitude of safety factors and anchor design values as described above and in Section 8.2 of this amended GAATP. Also, on installation sites with saturated soils and where soils are classified by Method 1 (particle size and consistency only), an engineering or geotechnical analysis or certification will be required on a site-specific basis.

Costs: This proposal will increase the cost of ground anchor assemblies, but with off-setting benefits. The main costs impact will be associated with re-testing of all ground anchor assemblies in accordance with the GAATP. Costs may also be incurred due to improved soil classification requirements and safety factors; however, this amended GAATP provides flexible solutions to control or avoid these costs based on the end-use application. Furthermore, the anchor assembly's performance need only be determined once, as this test protocol will be standardized for the entire country providing significant cost benefits from consolidation of regulatory compliance requirements. In addition, anchor performance will be made more reliable and consistent by improved soil characterization procedures and commensurate safety factoring of anchor load

resistance design values such that long-term cost and safety benefits should be expected (e.g., reduced losses or damage or maintenance and improved life safety) in exchange for a nominal installation cost increase.

In addition to the cost associated with testing and certifying/listing current ground anchor assemblies per the proposed GAATP, an additional cost would be required to re-design certain ground anchor assemblies to meet the most stringent requirements presented under the proposed ground anchor test protocol.

Given the many factors and uncertainties involved, an accurate assessment of the total cost cannot be determined at this time because some anchor systems may need to be re-designed, and others re-evaluated, based on successful results from future testing when the test protocol is approved for use by the Department. However, the anticipated increase in cost is considered to be justified by the overall benefits achieved as discussed above.

STANDARD TEST METHOD AND PERFORMANCE REQUIREMENTS FOR ESTABLISHING LOAD RESISTANCE DESIGN VALUES OF GROUND ANCHOR ASSEMBLIES USED FOR MANUFACTURED HOME INSTALLATIONS

1.0 SCOPE

.1 This ~~standard~~ testing procedures provides ~~a standard~~ test methods and performance requirements for establishing both ultimate loads and load resistance design values (working anchor loads) ~~to~~ that will enable and simplify the ground anchor assembly selection process and improve the effectiveness of anchoring systems.

.2 Each assembly or component of a ground anchor assembly evaluated in accordance with this standard shall be ~~considered tested by the methods that follow, and therefore be~~ suitable, as listed or certified for installation in an appropriately classified soil, for installation of manufactured homes on sites with appropriately classified soil.

.3 To secure approval of ground anchor assembly products and components, ground anchor manufacturers shall have their products tested and listed by a nationally recognized testing laboratory, or, tested and certified by a registered professional engineer in accordance with this standard.

The testing laboratory or registered engineer shall be free from any conflict of interest from the product manufacturer and the product manufacturer's affiliates.

2.0 REFERENCE DOCUMENTS

.1 ASTM D1586-~~08a1999~~, Test Method for Penetration Test and Split-Barrel Samplings of Soil, West Conshohocken, PA

.2 ASTM D2487-~~102000~~, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System), West Conshohocken, PA

.3 ASTM D2488-~~09a2000~~, Practice for Description and Identification of Soils (Visual - Manual Procedure), West Conshohocken, PA

.4 ASTM D3953-~~07a1997~~, Specification for Strapping, Flat Steel, and Seals, West Conshohocken, PA

.5 ASTM E4-~~09a2003~~, Practice for Force Verification of Testing Machines, West Conshohocken, PA

Comment [JHC1]: Only editorial revisions to this section.

Comment [JHC2]: Only updates to reference standards in this section (editorial).

.6 ASTM E74-~~062004~~, Practice for Calibration of Force Measuring Instruments for Verifying the Force Indication of Testing Machines, West Conshohocken, PA

.7 Manufactured Home Construction and Safety Standards, 24 CFR Part 3280, Department of Housing and Urban Development (HUD), Washington, DC

.8 Model Manufactured Home Installation Standards 24 CFR Part 3285, Department of Housing and Urban Development (HUD), Washington, DC

3.0 DEFINITIONS

~~.1 Allowable Deflection Limits - criteria establishing the maximum amount of bending of a material, assembly or component under load.~~

~~.1.2~~ Anchoring Equipment - (see model installation standard), 24 CFR Part 3285.

~~.2.3~~ Anchoring System - (see model installation standard), 24 CFR Part 3285.

~~.3.4~~ Approved - when used in connection with any material, appliance, or construction, means complying with the requirements of the Department of Housing and Urban Development.

~~.4 Certification Site - a site used for the purpose of ground anchor assembly qualification testing in accordance with this document.~~

~~.5.5 Cohesive Soil - a soil with sufficient clay content to exhibit substantial plastic behavior when moist or wet (i.e., able to be readily molded or rolled into a 1/8-inch thread at a wide range of moisture contents). A sticky soil-like clay or clayey silt with shear strength equal to half its unconfined compressive strength with an angle of internal friction close to zero degrees.~~

~~.6 End-use Site - see definition for "site".~~

~~.7.6~~ Ground Anchor - a specific anchoring assembly device designed to transfer ~~home-~~anchoring loads to the ground.

~~.8.7~~ Ground Anchor Assembly - any device or other means designed to transfer anchoring loads to the ground.

~~.9.8~~ Ground Anchor Manufacturer - any person or company engaged in manufacturing and/or importing ground anchor assemblies.

~~.10.9~~ Installation - (see model installation standard), 24 CFR Part 3285.

~~.110~~ Installer - any person responsible to site, support, anchor, place, connect, set up or install a manufactured home.

Comment [JHC3]: Only editorial changes to this section.

Comment [JHC4]: Term not used.

Comment [JHC5]: Added new definition

Comment [JHC6]: Definition modified to explain plastic behavior (parenthetical explanation given).

Comment [JHC7]: Added new definition

.124 Listed or Certified - included in a list published by a nationally recognized testing laboratory, inspection agency, or other organization concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states that either the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner. See also 24 CFR Part 3285.5.

.132 Load Resistance Design Value - the rated load capacity (working anchor load) in pounds ~~of the determined for a~~ ground anchor by dividing the Ultimate_{Anchor} Load by a safety factor; refer to Section 8.2.

.143 Manufactured Home - ~~s~~See 24 CFR 3280.2.

~~.14 Manufacturer - See MHIA 2000~~

.15 Non-cohesive Soil (cohesionless soil) - Sand, gravel, and similar soils that are predominantly granular and lack a sufficient quantity of fine, clay-sized particles to exhibit plastic behavior when moist or wet (i.e., cannot be rolled into a 1/8" diameter thread when moistened). also known as frictional soils since their properties are defined more by their angle of internal friction rather than by cohesion.

.16 Registered Engineer or Architect - See 24 CFR 3280.2.

.17 Site - an area of land that a manufactured home or structure is installed upon.

.18 Stabilizing Devices - all components of the anchoring and support system such as piers, footings, ties, anchoring equipment, ground anchor assemblies, and any other equipment which supports the manufactured home and secures it to the ground.

~~.19 State - any one of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, and American Samoa.~~

~~.20 Tie - strap, cable, or securing device used to connect the manufactured home to ground anchor assemblies.~~

~~.1924 Ultimate_{anchor} Load - the lowest~~er~~ maximum load achieved by testing six identical anchor installations where maximum load may be limited by ground failure, anchor mechanical failure, or vertical and horizontal displacement limits; refer to Section 8.1 of either the highest load achieved during an individual test prior to failure due to exceeding displacement limits, or, the load at failure of the anchoring equipment or its attachment point to the testing apparatus~~

Comment [JHC8]: MHIA 2000 is not cited in references. Also, meaning of manufacturer should be obvious in context of use.

Comment [JHC9]: Term is not used.

Comment [JHC10]: Term is not used.

Comment [JHC11]: Editorial clarification and coordination with derivation of Ultimate Anchor Load.

4.0 EVALUATION PROCEDURE

4.1 General. Ground anchor assemblies shall be selected for testing in accordance with Section 4.2. A certification (test) site shall be identified and soils characterized in accordance with Section 5.0. Using a test apparatus and measuring equipment in compliance with Section 6.0, ground anchor assemblies shall be installed and tested at the test site in accordance with Section 7.0. The Ultimate_{Anchor} Load for the tested ground anchor assembly shall be determined from test data in accordance with Section 8.1 and used to determine a load resistance design value in accordance with Section 8.2. Reporting requirements are stated in Section 9.0.

4.2 Selection of Test Specimens. A representative sample of necessary products for the required ground anchor assembly test shall be randomly selected by the testing, listing, or certifying entity. Engineered drawings and specifications shall be obtained from the manufacturer or producer of each selected product. The engineered drawings and specifications shall include the following:

- .1 dimensions and specifications on all welds and fasteners.
- .2 dimensions and specifications of all metal or material.
- .3 model number and its location on the ground anchor.
- .4 test data and results, if available.

5.04-0 DETERMINATION OF SOIL CHARACTERISTICS FOR GROUND ANCHOR ASSEMBLY LISTING AND CERTIFICATION

5.1 Basic Requirements. Soil at the certification site shall be classified in accordance with classification numbers in Table to 3285.202 (24 CFR Part 3285) using torque probe value or blow count (ASTM D1586). Alternatively, an equivalent soil test method with demonstrated correlation to torque probe or blow count values, such as the dynamic cone penetrometer, shall be permitted as a means for soil classification in accordance with Table to 3285.202. In addition, the following soil properties shall be assessed and reported:

- Soil group (particle size) classification in accordance with ASTM D2487 or ASTM D2488.
- Describe moisture condition of soil as dry, moist, or wet at the time of testing in accordance with Section 10.5 and Table 3 of ASTM D2488.
- Describe the soil plasticity as non-plastic, low, medium, or high in accordance with Section 14.5 and Table 11 of ASTM D2488.
- Describe the consistency of soil in accordance with Table 1 based on soil descriptions in Table to 3285.202 (24 CFR Part 3285) and Table 5 of ASTM D2488.

Comment [JHC12]: This new Section is primarily editorial in purpose and is intended to serve as a "road map" to the amended draft GAATP format.

Comment [JHC13]: This section has been completely revised to provide a reliable yet reasonably simple and flexible means of classifying soils as intended by the prior draft GAATP. To achieve this goal and also provide for efficient anchorage design, details for appropriate soil classification techniques have been included. These soil characterization guidelines are consistent with findings and recommendations based on verification testing and evaluation of soil characterization methods in a prior HUD research contract C-CHI-0083. The main report (Task 2d) is available as "Research and Analysis for Manufactured Housing Foundations: Ground Anchor Verification Testing", http://www.huduser.org/portal/publications/destech/grnd_anchor_2d.html. A Task 2c report (also available at the above web URL) includes an extensive literature review of the state of the art of ground anchor performance, design, and soil characterization methods.

Proper soil characterization is considered to be one of the main factors affecting variability in anchor performance and reliability. Proper soil characterization must occur at the anchor test site (Section 5.1) and also at the anchor end use site for anchor selection (Appendix B and Section 8.2). Therefore, soil characterization requirements for test sites and end-use sites are addressed and coordinated with derivation of anchor load resistance design values (Section 8.2).

TABLE 1 Criteria for Describing Soil Consistency

Soil Grain Size (ASTM D2488)		Criteria
Course Grain	Fine Grain	
Very loose	Very Soft	Thumb will penetrate soil more than 1 in.
Loose	Soft	Thumb will penetrate soil about 1 in.
Medium Dense	Firm	Thumb will indent soil about 1/4 in.
Very Dense	Stiff (hard)	Thumb will not indent soil; but readily indented with thumbnail
	Very stiff (hard)	Thumbnail will not indent soil

User Note: See Appendix A for information on soil test methods: torque probe, standard penetrometer test (ASTM D1586), and dynamic cone penetrometer.

5.2 Location and Frequency. Soil group classification, soil torque value or blow count, moisture condition, plasticity, and consistency shall be measured in accordance with Section 5.1 at a minimum of three sample locations representing the extent of the certification site test area. Soil characteristics shall be measured at a depth below ground surface of not greater than the anchor helix depth and not less than 2/3rds of the anchor helix depth for each ground anchor depth evaluated within the test area.

User Note: For ground anchor assemblies which include stabilizing devices at or near the ground surface and tested for lateral resistance, soil characteristics at or near the ground surface may better explain variation in anchor lateral load resistance performance.

Comment [JHC14]: User note to enhance understanding of soil characterization in association with predicting anchor performance.

5.3 Characteristic Soil Classification. The tested ground anchor assembly's load resistance design value determined in accordance with Section 8.2 shall be associated with the characteristic soil classification number in accordance with Table to 3285.202 (24 CFR Part 3285) as determined by the lowest torque value or blow count, or soil group and consistency, whichever results in the higher classification number (weaker soil class) for the certification site. Soil classification tests and anchor tests at the certification site shall be conducted under conditions of consistent soil moisture content and moisture content shall be representative of typical soil moisture conditions.

User Note: For some soils, such as cohesive soil, moisture content can have a significant impact on soil classification as well as anchor performance. Caution should be exercised to avoid assessing soil classification and anchor performance when site conditions are abnormally dry or wet. Also, anchor testing and soil classification should be conducted at the same time and under identical soil moisture conditions to avoid bias in associating anchor performance with soil classification methods (e.g., torque value or blow count).

Comment [JHC15]: User note to enhance understanding of potential soil moisture effects on anchor performance and associated methods of classifying soils.

4.1 General Description of Soil Classification

4.1 The general description of soil classification shall be permitted by the use of Table in 3285.202(a)(3)

4.2 Standards for Identification of Soil and Soil Classification

4.2.1 The method specified in section 4.2.1.1 shall be conducted to determine

~~the soil classification of the soil under analysis. Once the soil classification has been determined, the test described in 4.2.1.2 and 4.2.1.3 may be conducted to differentiate between a Class 4A and 4B classification.~~

~~.1 The soil classification shall be determined in accordance with the provisions of ASTM D 2487 or ASTM D 2488.~~

~~.2 The identification of the soil by blow count shall be determined in accordance with the provisions of ASTM D 1586.~~

~~.3 The soil test torque probe method shall be used in the field for soil identification. See Appendix A for additional information on the soil test torque probe method.~~

~~3 Classification in Non-Cohesive Soils~~

~~.1 Ground anchor assemblies shall be tested and listed or certified, and labeled for use in non-cohesive soil.~~

~~.2 Additionally, ground anchor assemblies shall be permitted to be tested, listed or certified, and labeled for use in cohesive soils.~~

~~6.0~~ **6.1 FIELD TESTING APPARATUS & MEASURING EQUIPMENT**

6.1 General Requirements. The ground anchor assembly testing apparatus shall be capable of safely applying loads sufficient to generate the Ultimate_{Anchor} Load. The soil reaction(s) of the test apparatus shall be located a sufficient distance from the tested anchor assembly to avoid interference with the anchor's cone of influence in the soil.

User Note: As a recommend practice, the test rig soil reactions (bearing pads) should not be located closer to the center of the ground anchor assembly (anchor head) than the lesser of D, 4d, or 32 inches where D is the depth of the anchor helix and d is the diameter of the anchor helix, both in inches. However, experience with a particular test rig, types of anchors, and soil conditions may justify other acceptable dimensional tolerances.

6.2 Displacement Controlled Load Application. The testing apparatus shall be capable of maintaining an increasing load application at a constant displacement rate of up to 0.6 in/min.

6.3 Test Apparatus Connection to Ground Anchor. Test apparatus shall be connected to the ground anchor in a manner representative of end-use conditions.

User Note: Generally, a satisfactory connection to the anchor head for testing purposes involves the use of a bolted connection to the anchor head without rotational restraint introduced to the anchor head (i.e., pinned joint).

Comment [JHC16]: This section has been completely revised to address findings and recommendations documented in the Task 2c and 2d reports for HUD mentioned previously. First, a specific load capacity for the test apparatus has been replaced with a flexible, performance-based requirement that the test rig be capable of safely applying the required loads. This will permit variations in test rigging, including factors such as portability, that best match the intended range of application for a given test rig. Also added is guidance on test rig configuration to ensure that the test rig soil reactions (bearing points) do not interfere with the tested anchor's performance.

Constant displacement control has been added to ensure that dynamic and time-effect loading conditions do not adversely affect tested anchor performance and repeatability of tested performance -- a concern documented in the mentioned HUD Task 2d report which can result in as much as 20% increase in anchor load relative to a more uniform load application.

Language has been added to clarify angle of pull documentation, while allowing flexibility in how angle of pull is addressed by the configuration of test rigging.

Information providing reasonable minimum precision requirements for load and displacement measurements have also been added. These requirements are consistent with common practices and the levels of precisions are commensurate with the levels of overall uncertainty in anchor performance and design.

Comment [JHC17]: User note to clarify the generalized test rig requirements in 6.1.

Comment [JHC18]: User note to clarify generalized requirements in 6.3.

6.4 Angle of Pull. Where the test apparatus configuration results in a changing angle of pull due to anchor assembly displacement during a lateral angle pull test, the angle of pull at the Ultimate_{Anchor} Load shall be recorded as the load angle for the test. Load angle shall be measured relative to the plane of the ground surface and shall be permitted to be rounded to the nearest 5 degree increment.

6.5 Load Measurement. Load measurement devices shall have maximum 50 pounds reading increments, shall be calibrated or verified in accordance with ASTM E4 and E74 and shall provide an accuracy within +/- 2% of applied load. Measurements shall be permitted to be rounded to the nearest 25 pounds.

6.6 Displacement Measurement. Vertical displacement (for all tests) and horizontal displacement (for lateral angle pull tests) shall be measured relative to the centerline of the test apparatus' connection to the ground anchor assembly (anchor head) and the ground. A stable ground reference point for displacement measurements shall be located independent of the test apparatus and not closer to the anchor than the soil reaction points of the test apparatus as required in Section 6.1. Displacement measurements shall be taken using a device with not less than 1/8-inch reading increments. Measurements shall be permitted to be rounded to the nearest 1/8-inch increment.

~~.1 Field Tests of the Installed Ground Anchor Assemblies~~

~~.1 Field tests shall be conducted to establish the load resistance design value (working anchor load) of installed ground anchor assemblies for the soil characteristics determined in Section 4.0.~~

~~.2 The test equipment for conducting tests to certify a ground anchor assembly for use in a classified soil shall be capable of applying a minimum of a 10,000 pound force to the installed anchoring assembly in accordance with Section 8.9.~~

~~.3 The testing equipment shall be calibrated in accordance with ASTM E4 and found to be within a tolerance of 1 percent. Method of verification and pertinent data shall be in accordance with ASTM E4. The testing device shall be verified in accordance with ASTM E74.~~

6.0 TEST SPECIMENS

~~.1 Ground Anchor Assemblies~~

~~.1 Each manufacturer or producer shall submit the following information for evaluation:~~

~~.1 engineered drawings and specifications of each product including:~~

Comment [JHC19]: Editorial. Items are moved into Section 4.0 which serves as a "roadmap" for the GAATP.

- ~~.1 dimensions and specifications on all welds and fasteners~~
- ~~.2 dimensions and specifications of all metal or material~~
- ~~.3 model number and its location on the ground anchor~~
- ~~.4 test data and results, if available,~~

~~.2 Necessary products for the installed ground anchor assembly test shall be randomly selected by the testing, listing, or certifying entity.~~

7.0 TEST REQUIREMENTS

4 Ground Anchor Assembly Testing

- ~~.1 Field tests shall be performed on each ground anchor assembly installed in a classified soil as defined in section 4.0.~~
- ~~.2 Field test apparatuses shall be as specified in 5.0, and shall conform to the testing requirements of 8.0.~~

Comment [JHC20]: Editorial change. Items are addressed in new Section 4.0 which serves as a "roadmap" for the GAATP.

7.0 8.0 FIELD TESTS OF GROUND ANCHOR ASSEMBLIES INSTALLATION CONFIGURATIONS AND REQUIREMENTS FOR CERTIFICATION SITE TESTING

~~.1 The soil characteristics at the test site shall be identified and recorded according to section 4.0. In addition, the following information shall be recorded at each test site: date, approximate time, current and recent weather conditions that may affect test results, and names of persons witnessing the ground anchor assembly tests.~~

Comment [JHC21]: Most of the changes to this section are editorial to coordinate with other editorial and format changes. The editorial and technical changes are identified and explained in comments below. Where no comment is provided the revisions are considered to be editorial.

Comment [JHC22]: Addressed in Sections 4.1 and 5.0

Comment [JHC23]: Addressed in Section 9.0.

~~.2 Connection of the testing apparatus to the ground anchor assembly head shall provide loading conditions to the anchor head, similar to actual site conditions. Adequacy of the connection shall be determined by the testing agency or test engineer.~~

Comment [JHC24]: Addressed in Section 6.3

~~.3 Ground anchor manufacturers shall be permitted to have ground anchor assemblies tested and listed by a nationally recognized testing laboratory or tested and certified by a registered professional engineer (1.3).~~

Comment [JHC25]: Topic addressed in Section 1.3

~~.4 A minimum of six tests shall be performed and the result of each test shall meet or exceed 4,725 pounds pull (3150 x 1.5 factor of safety) in the direction of pull. A ground anchor assembly shall be considered to have failed when the anchor head, or its attachment point, displaces 2 inches in the vertical direction or 3 inches in the horizontal direction from its pre-tensioned measurement position before holding a total load of 4,725 pounds including any pretensioned load.~~

Comment [JHC26]: Test repetitions addressed in Section 7.2 and performance criteria in Section 8.0.

Comment [JHC27]: Addressed in Section 7.1 below.

~~.5 Special purpose ground anchor assemblies, including those needed to accommodate unique design loads identified by manufacturers in their installation instructions, may be certified under section 8.4 or to more stringent requirements such as higher working loads, more restrictive anchor head displacements and/or tested angle limitations.~~

7.1 .6 Ground Anchor Assembly Field Test Methods ~~.1 To determine the load-resistance design value (working anchor load) of a A ground anchor assembly, it shall be~~

tested ~~in accordance with requirements for by~~ one or more of the ~~following assembly configurations addressed in Sections 7.1.1, 7.1.2, and 7.1.3;~~ ~~ground anchor/stabilizer plate method of 8.7, the vertical in-line ground anchor method of 8.8, or the in-line ground anchor method of 8.9~~ ~~Alternate configurations shall be acceptable provided test conditions appropriately simulate actual end-use conditions and the as-tested configuration is addressed in the manufacturer's installation instructions.~~ ~~The as-tested configuration of any ground anchor assembly, and~~ shall be a condition of the listing or certification in accordance with this standard. ~~2 Ground anchor assemblies designed for multiple connections to the manufactured home shall be individually tested as specified in 8.7 and 8.8.~~

Comment [JHC28]: Addresses deleted item .5 above and allows some flexibility to accommodate alternative means and methods for anchor installation not otherwise anticipated in the GAATP but not intended to be restricted by the GAATP.

Comment [JHC29]: Addressed in Section 7.1.1(d) and Appendix C.

7.1.1.7 Ground Anchor Assembly/Stabilizer Plate Method.1 ~~The following~~ ~~g~~ Ground anchor assembly installation and ~~testing withdrawal~~ procedures for test purposes shall be ~~as follows, and shall be used~~ consistently ~~applied for throughout~~ all ~~required~~ tests:-

~~a)-4~~ the ground anchor shall be installed at an angle of 10 -15 degrees from vertical to a depth of one-half (1/2) to two-thirds (2/3) of the anchor length.

~~b)-2~~ a stabilizer plate shall be driven vertically on the side of the ground anchor shaft facing the tensioning equipment three inches from the shaft ~~and the top of the plate shall be installed flush with the soil surface or not more than 1 inch below the soil surface.~~

~~c)-3~~ the ground anchor shall be driven to its full depth into the soil ~~with the bottom of the anchor head not more than 3/4 inch above the stabilizer plate.~~

~~d)-4~~ the ground anchor head shall be attached to the tensioning equipment such that the tension load and displacement can be recorded. The tensioning equipment shall be positioned to load the ground anchor and stabilizer plate at ~~the minimum a maximum of a 30-degree~~ angle to the test site ground surface ~~for which the anchor is being evaluated.~~

~~User Note:~~ Additional testing at angles of pull greater than the minimum angle of pull may be used to provide design values for specific angles of pull greater than the minimum angle for which evaluation is sought.

~~e)-5~~ the ground anchor shall be pre-tensioned so that the anchor shaft contacts the stabilizer plate to achieve a maximum tension of 500 pounds applied to the anchor head.

~~f)~~ if the anchor shaft does not come into contact with the stabilizer plate a ~~anchor setting load not to exceed 1,000 pounds shall be permitted to be applied and then released prior to re-application of the 500-pound pre-tension force.~~

Comment [JHC30]: Ensures consistency and repeatability of test results (see HUD Task 2d report); based on anchor manufacturer recommendations at test sites.

Comment [JHC31]: Ensures consistency and repeatability of test results (see HUD Task 2d report); based on anchor manufacturer recommendations at test sites.

Comment [JHC32]: Allows for a range of angle pulls to be considered.

Comment [JHC33]: User note added to provide flexibility in application of test data to forces applied at angles of pull intermediate to those tested.

Comment [JHC34]: Ensures consistency and repeatability of test results (see HUD Task 2d report); based on anchor manufacturer recommendations at test sites.

~~g)-6 displacement readings shall be zeroed at the location of the ground anchor head while under the 500-pound shall be marked after it is pre-tensioned force and then measuring simultaneously with increasing load after constant displacement of the anchor is initiated by operation of the test apparatus, subsequent movement under test loading.~~

~~2) Apply the load continuously throughout the test at a positive rate of displacement of the loading device used. The recommended speed of testing shall be such that the loading to the ultimate anchor load is reached in not less than 2 minutes from the start of the test.~~

Comment [JHC35]: Addressed in Section 7.3

~~7.1.2.8 Vertical In-Line Ground Anchor Assembly Method.4 The following gGround aAnchor aAssembly installation and testing withdrawal procedures for test purposes shall be as follows, and shall be used consistently applied for throughout all required tests:-~~

~~a)-4 the ground anchor shall be installed vertically.~~

~~b)-2 the ground anchor shall be driven to its full depth into the soil.~~

~~c)-3 the ground anchor head shall be attached to the tensioning equipment such that the load and ground anchor head displacement can be recorded.~~

~~d)-4 the anchor shall be pulled in line with the ground anchor shaft.~~

~~e)-5 the ground anchor shall be pre-tensioned to achieve a maximum tension of 500 pounds applied to the anchor head.~~

~~f)-6 displacement readings shall be zeroed at the location of the ground anchor head while under the 500-pound pre-tension force and then measured simultaneously with increasing load after constant displacement of the anchor is initiated by operation of the test apparatus, shall be marked after it is pre-tensioned for measuring subsequent movement under test loading.~~

~~2) Apply the load continuously throughout the test at a positive rate of displacement of the loading device used. The recommended speed of testing shall be such that the loading to the ultimate anchor load is reached in not less than 2 minutes from the start of the test.~~

Comment [JHC36]: Addressed in Section 7.3

~~7.1.3.9 In-Line Ground Anchor Assembly Method.4 The following gGround aAnchor aAssembly installation and testing withdrawal procedures for test purposes shall be as follows, and shall be used consistently applied for throughout all required tests:-~~

~~a)-4~~ the ground anchor shall be installed at an angle from the horizontal ground surface at which it is to be rated.

~~b)-2~~ the ground anchor shall be driven to its full depth into the soil.

~~c)-3~~ the ground anchor head shall be attached to the tensioning equipment such that tension and displacement can be recorded.

~~d)-4~~ the anchor shall be pulled in line with the ground anchor shaft.

~~e)-5~~ the ground anchor shall be pre-tensioned to create a maximum tension of 500 pounds applied to the anchor head.

~~f)-6 displacement readings shall be zeroed at~~ the location of the ground anchor head ~~while under the 500-pound pre-tension force and then measured simultaneously with increasing load after constant displacement of the anchor is initiated by operation of the test apparatus shall be marked after it is pre-tensioned for measuring subsequent movement under test loading.~~

~~2 Apply the load continuously throughout the test at a positive rate of displacement of the loading device used. The recommended speed of testing shall be such that the loading to the ultimate anchor load is reached in not less than 2 minutes from start of the test.~~

Comment [JHC37]: Addressed in Section 7.3

~~7.2 Test Repetitions. A minimum of six ground anchor assembly test specimens shall be installed for each of the assembly methods of Section 7.1 for which evaluation is desired.~~

~~7.3 Displacement Rate and Test Duration. A constant displacement rate of no greater than 0.6 in/min. shall be applied to the ground anchor assembly using a test apparatus in accordance with Section 6.0. The Ultimate_{Anchor} Load shall be achieved in not less than 2 minutes.~~

Comment [JHC38]: A constant displacement rate (displacement controlled test) is specified for reasons addressed above in Section 6.0. A maximum displacement rate of 0.6 in/min. is provided as a means of complying with the minimum 2-minute test duration, to avoid elevated test values as a result of inadequate time for soil relaxation (creep), to provide adequate time for visual/manual measurements and observations during the course of testing, and to provide improved repeatability of test results.

~~7.4 Load-Deflection Data Collection. 10 Record the Load and displacement measurements shall be recorded at no greater than, at approximately 500/1000 pound increments of pull and a minimum of 5 data points shall be recorded to define the load-deflection curve extending from the pre-tension load to the Ultimate_{Anchor} Load or the next load increment beyond the Ultimate_{Anchor} Load. Interpolation between displacement and load measurements shall be permitted to determine the Ultimate_{Anchor} Load. such that a minimum of five data points will be obtained to determine a load-deflection curve. For each datum, the applied load and the ground anchor head displacement shall be recorded. In addition, the load and displacement shall be recorded at the Failure Mode identified in section 9.1. the ultimate anchor load of the ground anchor assembly and corresponding displacement shall be recorded.~~

Comment [JHC39]: Edits to this section are mainly editorial; however, this edit provides clarification needed to allow the data to be interpolated to determine the Ultimate Anchor load value when data points do not happen to capture the instant when the anchor displacement reaches one of the displacement limit criteria. This condition is likely to occur with visual/manual methods of load and displacement measurement. Peak loads due to anchor or ground failure are generally captured by maximum load indicators on mechanical load gauges.

~~8.11 All ground anchor assemblies shall be tested to failure due to displacement of the ground anchor assembly as established in section 9.0, or failure of either the anchoring equipment or its attachment point to the testing apparatus.~~

Comment [JHC40]: This topic as adequately addressed in Section 7.4 and in Section 8.0

8.09.0 PERFORMANCE FAILURE CRITERIA AND RATING

8.1 Ultimate_{Anchor} Load Value. The Ultimate_{Anchor} Load value shall be determined as the lesser of the following:

- a) the minimum peak load achieved for all six test repetitions required for each ground anchor assembly configuration evaluated.
- b) the minimum load achieved for all six test repetitions at a maximum vertical displacement of 2 inches or a maximum horizontal displacement of 3 inches, whichever first occurs during each test.

8.2 Load Resistance Design Value. The ground anchor assembly's load resistance design value (rating or working load) shall be determined by dividing the Ultimate_{Anchor} Load value (Section 8.1) by the appropriate safety factor from Table 2 corresponding to the method of soil characterization used for anchor selection purposes at a given end-use site (see Appendix B). The load resistance design value for each evaluated installation method (see Section 7.1), the characteristic soil classification (see Section 5.3), and each method of end-use site soil characterization (see Appendix B) shall be stated in the ground anchor assembly's listing or certification. Where the soil moisture condition at the end-use site is saturated within the depth of the anchor and the soil is classified by Method 1 in accordance with Table 2 and Appendix B, a registered design professional shall certify the anchor load resistance design value and installation for use in saturated soil conditions.

TABLE 2 Safety Factors

Soil Classification Method for End-Use Site (Appendix B)	Safety Factor
Method 1 – Soil group classification by ASTM D2487 or D2488 and consistency	2.5
Method 2 – Torque value, blow count, or equal	1.5
Method 3 – End-use site anchor testing	1.3

8.3 Application of Load Resistance Design Value. The load resistance design value determined in accordance with Section 8.2 is intended to be used with 24 CFR 3285.402. Where the load resistance design value (working load) is less than 3,150 pounds, the required anchor spacing in Tables 1, 2, or 3 of 24 CFR 3285.402 shall be multiplied by a factor equal to the anchor's load resistance design value divided by the standard 3,150-pound anchor working load. Where the anchor load resistance design value is greater than 3,150 pounds and the attachment to the manufactured home is designed to meet or exceed an anchor load resistance design value, the anchor spacing required in

Comment [JHC41]: This section has been completely revised; however, the deflection limit criteria, number of tests, and definition of the Ultimate Anchor load value remain unchanged. The section has been written as a performance-based approach to give greater flexibility in using anchors that do not meet or exceed the current standard 3150 lb working load value used in 24 CFR 3285, while still providing the level of performance or safety intended by 24 CFR 3285.

Comment [JHC42]: In Appendix B, Soil characterization at end use sites provides the end user with three methods ranging from simple and less reliable to more intensive and more reliable with commensurate trade-offs in efficiency of anchor design and overall anchorage cost (including site soil characterization, anchor sizing, and installation costs). Using more reliable soil characterization methods results in ability to use a smaller safety factor and potentially fewer or smaller sized anchors to achieve the same level of reliability or safety when using a less reliable soil characterization method with commensurately higher safety margins to provide equivalent reliability or performance, resulting in use of larger anchors or greater quantities of anchors. Based on economies of scale, the end user can select a soil characterization method that best optimizes anchorage selection and installation costs for a given end use site or sites.

Safety factors have been reduced from those determined in the HUD Task 2d report, based on experience with successful anchorage design when soils are adequately characterized at the end-use site (e.g., Method 2 maintains a traditional safety factor of 1.5 where a safety factor of 2.0 is required by theory as evaluated in the HUD Task 2c and 2d reports). In addition, for Method 1 a theoretical safety factor of 4.0 was determined, but a safety factor of 2.5 is recommended for practical reasons based on past experience when this simple (yet unreliable) method of soil classification is used at an end-use site for anchor selection purposes. Method 3 offers the greatest efficiency in anchor design, but requires testing at the end-use (installation) site. This approach is most cost-effective when used on a development scale rather than at a single site scale.

Comment [JHC43]: This new section allows for a performance-based design approach (more efficient anchor design) in coordination with prescriptive anchor design value targets and spacing requirements of 24 CFR Part 3285.402.

Tables 1, 2, and 3 of 24 CFR 3285.402 shall be permitted to be multiplied by a factor equal to the anchor's load resistance design value divided by the standard 3,150-pound anchor working load. For applications other than 24 CFR 3285.402, the ground anchor shall be used in accordance with an approved design and the ground anchor manufacturer's recommendations.

4 Failure Modes:

- ~~.1 When the anchor head, or its attachment point, displaces 2 inches in the vertical direction or 3 inches in the horizontal direction from its pretensioned measurement position prior to holding a total load of 4,725 pounds (including any pretension load).~~
- ~~.2 When the anchor head, or its attachment point, displaces 2 inches in any direction from its pretensioned measurement position prior to holding a total load of 3150 pounds (including any pretension load).~~
- ~~.3 When breakage of any component of the ground anchor shaft occurs prior to reaching a total load of 4,725 pounds.~~

Comment [JHC44]: Addressed in new Section 8.1 above.

10.0 USE OF ULTIMATE_{anchor} LOADS TO ESTABLISH THE LOAD RESISTANCE DESIGN VALUE (WORKING ANCHOR LOAD)

- ~~.1 The load resistance design value (working anchor load) shall be the lowest ultimate_{anchor} load determined by testing, divided by the 1.5 factor of safety.~~
- ~~.2 A field test shall be performed in the weakest soil that the ground anchor is being qualified for use. The load resistance design value for each installation method, shall be stated in the ground anchor assembly listing or certification.~~

Comment [JHC45]: Addressed in new Section 8.2 above.

9.0 11.0 TEST REPORT

9.1 Minimum Reporting Requirements. The test report to support the listing or certification for each ground anchor assembly tested shall include all conditions of use including the following:

- .1 a copy of all test data accumulated during the testing;
- .2 the soil characteristics and methods for determining soil characteristics for each type of soil for which the ground anchoring assembly was evaluated;
- .3 the model of the ground anchor assembly tested;
- .4 the ground anchor assembly test method used;
- .5 detailed drawings including all dimensions of the ground anchor assembly and its components;
- .6 method of installation at the test site;
- .7 date of installation and date of testing;
- .8 location of the test site;
- .9 test equipment used;
- .10 the load resistance value in pounds exerted and resultant displacement in inches for each ground anchor assembly test;
- .11 the load resistance design value determined in accordance with 8.210-4;

- .12 description of the stabilizer plate used in each ground anchor assembly/stabilizer plate test, including the manufacturer;
- .13 angles for installation;
- .14 embedment depth of the ground anchor assembly;
- .15 the application and orientation of the applied load;
- .16 describe the mode and location of failure for each ground anchor assembly tested;
- .17 observation of weather conditions;
- .18 name and signature of the nationally recognized testing agency, or registered professional engineer certifying the testing and evaluation.

9.2 Approved Ground Anchor Assemblies

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.1 Each manufacturer or producer shall provide the following information with each shipment of ground anchor assemblies for ~~use of~~ approved ~~use~~ ground anchor assemblies:

- .1 drawings showing ground anchor installation;
- .2 specifications for the ground anchor assembly including:
 - .1 soils listed for use;
 - .2 working loads for the anchor assembly in classified soils;
 - .3 model number and its location;
 - .4 instructions for use including pretensioning; and,
 - .5 approved angles for installation.

.3 The above information, including the listing or certification documentation for the ground anchor assembly, shall be used by the installer to verify appropriate anchor size and rating prior to installation and such information shall be made available by the installer for inspection at the installation (end-use) site.

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APPENDIX A

Soil Test ~~Torque Probe Methods~~

~~Decisions concerning manufactured home foundation support systems are based on many factors. This appendix presents one method for determining the type of soil and the soil classification for which the home will be sited, the torque probe method.~~

~~The USA has a wide variety of soils. Since it is the soil that supports the home, understanding the properties of the different soil types or classes is fundamental to sound foundation system selection and design through the use of ground anchor assemblies.~~

~~In addition, knowledge of the soil classification, and the ground anchor assembly that best suites the foundation system design, can lead to economical and sound ground anchor assembly selection, and contribute to the long-term durability of the system performance.~~

~~Knowledge of these general soil types or classification, and how soil properties affect the ground anchor assembly design is important to contractors and other involved in the home installation process (including retailers and installers). In most instances, making a detailed analysis of the soil type or classification can lead to improved performance of common ground anchor assemblies. This **standardized test method for establishing load resistance design values** is attempting to list/certify and label ground anchor assemblies for universal use around the USA based on the appropriate soil classification.~~

Torque Probe Method – One manner to identify the soil type or classification is through the use of a tool referred to as a soil test torque probe kit. This kit contains a 5-foot long steel earth-probe rod, with a helix at the end. It resembles a wood-boring bit on a larger scale. The tip of the probe is inserted as deep as the bottom helix of the ground anchor assembly that is being considered for installation. The torque wrench is placed on the top of the probe.

The torque wrench is used to rotate the probe steadily as one can read the scale on the torque wrench. If the torque wrench reads 551 inch-pounds or greater, then a Class 2 soil is present according to the Table to 24 CFR 3285.202(a)(3). A Class 3 soil is from 351 to 550 inch-pounds. A Class 4A soil is from 276 to 350 inch-pounds, and a Class ~~4B~~ soil is from 175 to 275 inch-pounds. When the torque wrench reading is below 175 inch-pounds, a professional engineer should be consulted.

Most ground anchor assembly manufacturers provide a chart of the ground anchor types they recommend according to the torque readings determine by the torque probe. ~~The torque probe method (4.2.1.3), in addition to the blow count test method (4.2.1.2) and the soil classification determination according to ASTM Standards (4.2.1.1), must be used to determine soil classification for the selection of ground anchor assemblies approved using this standardized test method.~~

Standard Penetration Test (SPT) – As stated in ASTM D1586, the SPT method “is used extensively in a great variety of geotechnical exploration projects. Many local correlations and widely published correlations which relate blow count, or N-value, and the engineering behavior of earthworks and foundations are available.” This method is also used to establish soil classes in accordance with the Table to 3285.202 (24 CFR Part 3285). For additional information on the SPT method, refer to ASTM D1586 (www.astm.org), relevant geotechnical literature, and test equipment manufacturer information.

Dynamic Cone Penetrometer (DCP) – This soil test method is similar to the SPT method, but uses a smaller more portable probe and is generally considered ideal for efficiently assessing shallow sub-soil conditions (up to 10-foot depth). Most DCP manufacturers provide correlations to the SPT method blow count, or N-value. The DCP method has also been correlated to the torque probe method. A study conducted by HUD in support of developing this standard has also shown that the DCP can provide an equivalent or better correlation to ground anchor performance than the torque probe or SPT methods. For additional information on the DCP method, refer to the relevant geotechnical literature and test equipment manufacturer information.

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APPENDIX B

Soil Characterization at End-Use Sites for Ground Anchor Assembly Selection

As indicated in Section 8.2 and Table 2 of this standard, the method of classifying a soil at an end-use site impacts the safety factor used to determine load resistance design values for ground anchors. The safety factors account for uncertainties in anchor performance at a given end-use site due to the method by which soil is characterized for anchor selection purposes. The relationship of safety factor magnitude to soil characterization method ensures a consistent level of reliability is achieved for the method of soil characterization used at an end-use site for anchor selection purposes. Consequently, using a more reliable method of soil characterization at an end-use site results in a more efficient ground anchor design, and vice versa.

The three methods of end-use site soil classification in order of increasing reliability are described as follows:

Method 1 – Soil is classified in accordance with classification numbers of Table to 3285.202 using a soil group (particle size) classification in accordance with ASTM D2487 or ASTM D2488 (visual-manual procedure) and consistency in accordance with Table 1 of this standard. Soil group classification and consistency shall be based on a representative sample for a single site taken at a depth below ground surface of not greater than the ground anchor helix depth and not less than 2/3rds the anchor helix depth. Where multiple sites in close proximity are characterized together, a minimum of three evenly distributed soil group classifications shall be conducted and the soil group and consistency associated with the greatest

(weakest) soil classification number of Table to 3285.202 shall be used for selection of a ground anchor assembly certified in accordance with this standard.

Method 2 – Soil is classified in accordance with classification numbers of Table to 3285.202 (24 CFR Part 3285) using torque probe value or blow count (ASTM D1586 or dynamic cone penetrometer) corresponding to a depth below ground of not less than 2/3rds the anchor helix depth nor greater than the anchor helix depth. For soils with a medium or high plasticity (cohesive soil) as determined in accordance with Section 14.5 and Table 11 of ASTM D2488, soil classification using torque probe or blow count at depths of less than 4 feet shall be required to be conducted at a typical soil moisture condition for the end-use site or, for abnormally dry conditions, the soil class determined shall be adjusted to the next greater classification number reported in the Table to 2385.202. For single sites, a minimum of three torque probe values or blow counts shall be averaged for measurements evenly distributed over the spatial extent of the proposed anchorage layout. Where multiple sites in close proximity are characterized, a minimum of six measurements shall be conducted and distributed evenly over the multiple site area; the lowest three values shall be averaged.

Method 3 – The ground anchor assembly is tested and a site-specific anchor load resistance design value for the end-use site is determined in accordance with this standard. The required six tests shall be evenly distributed over the spatial extent of the proposed end-use site (including multiple sites if applicable). For soils with a medium or high plasticity (cohesive soil) as determined in accordance with Section 14.5 and Table 11 of ASTM D2488, site-specific anchor tests for anchors installed at less than a 4-foot depth or for anchors using a lateral stabilizing device at or near the soil surface shall be conducted at soil moisture conditions considered to be normal for the site.

ATTACHMENT J
PROPOSALS
VENTING SYSTEM TERMINATIONS
LOG # 69

3280HUD- Log #69
(710(d))

Final Action:

Submitter: Kevin G. Jewell, Austin, TX

Recommendation: Revise text to read as follows:

3280.710(d) Venting system terminations shall be not less than ~~three~~ ten feet from any motor-driven air intake discharging into habitable areas.

Substantiation: Per public testimony, three foot separation is a potential air quality safety hazard.

This change is intended to reduce that safety hazard.

Public Testimony implies benefit of health and marketing outweighs compliance costs.

ATTACHMENT K
PROPOSALS
TANKLESS WATER HEATER
LOG #70

3280HUD- Log #70
(3280.703, 3280.707(a)(2))

Final Action:

Submitter: Donald Emen, Rinnai America Corp.

Recommendation: Revise text to read as follows:

3280.703 Minimum standards. Under *APPLIANCES*. In this section, I would like to add ANSI Z21.86 standard. The justification for this addition is to include this standard for vented space heating appliances or direct heating equipment.

Vented Gas-Fired Space Heating Appliances - ANSI Z21.86-2008, with Addendum Z21.86a-2005 and Z21.86b-2007.

Under *APPLIANCES*. In this section, I would like to add ASHRAE Standard 103. The justification for this addition is to include the standard used in testing for the Annual Fuel Utilization Efficiency (AFUE) for vented space heating appliances or direct heating equipment:

Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers - ANSI/ASHRAE standard 103-2007 (Supersedes ANSI/ASHRAE Standard 103 - 1993)

3280.707 (a)(2) Heat producing appliances.

Revise this section to add the AFUE as required for Direct Heating Equipment as per the DOE standard 10 CFR 430 Part 32(i).

Gas and oil Burning comfort heating appliances shall have a flue loss of not more than 25 percent, and a thermal efficiency and annual fuel utilization efficiency of not less than that specified in nationally recognized standards (See 3280.703)

Substantiation: The purpose of this proposal is to add the ANSI Z21.86 for gas-fired space heating appliance to the MHCC. This standard covers a wide variety of products -- including direct-vent wall furnaces.

Note: Supporting material is available for review at NFPA Headquarters.

ATTACHMENT L
PROPOSALS
TANKLESS WATER HEATER
LOG # 71

3280HUD- Log #71
(3280.703, 3280.707(d)(2))

Final Action:

Submitter: Donald Emen, Rinnai America Corp.

Recommendation: Add text to read as follows:

3280.703 Minimum standards. Under *APPLIANCES*. In this section, I would like to add ANSI Z21.10.3 volume III standard. The justification for this addition is to include the standard for tankless water heaters with input rate between 75,000 Btu/hr. and 400,000 Btu/hr:

Gas Water Heaters Vol. 1, Storage Water Heaters With Input Ratings of 75,000 BTU per hour or Less-ANSI Z21.10.1-1990, With Addendum Z21.10.1a-1991 and Z21.10.1b-1992.

Gas Water Heaters Vol. 3, Storage Water Heaters With Input Ratings Above 75,000 BTU per hour, Circulating and Instantaneous - ANSI Z21.10.3-2004, With Addendum Z21.10.3a-2007 and Z21.10.3b-2008.

3280.707(d)(2) Heat producing appliances.

Under Performance efficiency. After section 2, I would like to add a new section (3), dedicated to gas-fired tankless water heaters. The reason being that the tankless water heaters have separate efficiency performance table (as per DOE standard 10 CFR 430, Part 32, Section d) to the tank water heaters. Therefore, I believe combining the two efficiency tables would be confusing.

(3) All gas-fired instantaneous water heaters shall have an energy factor (EF), the rated volume in gallons (V) and thermal efficiency (E_t), as described below. The method of test of EF and V shall be as described in the DOE standard 10 CFR Part 430, Appendix E, and the method of test of E_t shall be as described in section 2.9 of Gas Water Heaters Vol.3, Storage Water Heaters With Input Ratings Above 75,000 BTU per hour, Circulating and Instantaneous - ANSI Z21.10.3-2004, With Addendum Z21.10.3a-2007 and Z21.10.3b-2008.

Insert table here

Substantiation: The purpose of this proposal is to add the ANSI Z21.10.3 Standard, Volume III for water heaters with input rate above 75,000 BTUH to the MHCC. This standard covers a wide variety of products -- including tankless water heaters. The tankless water heaters are classified as energy efficient water heaters.

Note: Supporting material is available for review at NFPA Headquarters.

Size Category (Input)	Subcategory or Rating Condition	Performance Required	Test Procedure
>50,000 Btu/h and <200,000 Btu/h	>4000 (Btu/h)/gal and <2 gal	0.62-0.0019V EF	DOE 10 CFR Part 430
>200,000 Btu/h	>4000 (Btu/h)/gal and <10 gal	80% E _t	ANSI Z21.10.3

ATTACHMENT M
PROPOSALS
RECEPTACLE OUTLETS
LOG #72

3280HUD- Log #72
(3280.806)

Final Action:

Submitter: Vince Baclawski, National Electrical Manufacturers Association (NEMA)

Recommendation: Add text to read as follows:

(a) All receptacle outlets shall be:

(1) Of grounding type;

(2) Installed according to Article 406.3 of the National Electrical code, NFPA No. 70-2005.

(3) Except when supplying specific appliances, be parallel-blade, listed tamper-resistant, 15-ampere, 125-volt, either single or duplex.

Substantiation: The 2008 National Electrical Code has adopted requirements for tamper-resistant receptacles as follows:

"406.11 Tamper-Resistant Receptacles in Dwelling Units. In all area specified in 210.52, all 125-volt, 15- and 20-ampere receptacles shall be listed tamper-resistant receptacles." 210.52 specifies required receptacles for dwelling units, where a dwelling unit is defined as "A single unit, providing complete and independent living facilities for one or more persons, including permanent provisions for living, sleeping, cooking and sanitation."

What follows is essentially the substantiation provided by NEMA for the 2008 National Electrical Code development cycle.

Pediatric Burns:

During a 10-year period, from 1991 to 2001, over 24,000 children in the United States were injured when they inserted foreign objects into electrical receptacles. Every year an average of at least 2,400 children are injured when tampering with electrical receptacles.

I have included a summary of electrical burn and shock incidents occurring to children under the age of 10. This information is taken from the National Electrical Injury Surveillance System (NEISS) for the years 1991 to 2001 Electronic Injury surveillance System (NEISS) is a national probability sample of hospitals in the U.S. and its territories. Patient information is collected from each NEISS hospital for every emergency visit involving an injury associated with consumer products. From this sample, the total number of product-related injuries treated in hospital emergency rooms nationwide can be estimated.

NEISS collects data from a statistically valid sample of hospitals nationwide. NEISS calculates historic estimates based on these samples using statistical tools (weights, sampling error, trend data, adjustment for changes in sampling frame...). NEISS provides at least 2 numbers for each query conducted on their web site:

- The first number is the actual sample for monitored hospitals. These are actual cases that were communicated to NEISS.
- The second number is the historic estimate calculated by NEISS as explained above.

For example, the 2002 NEISS report shows a sample count of 129 electrical burn and shock incidents and a historical estimate of 3277.

For the purpose of this analysis, we calculated a ratio, based on 10 years of data, between sample and historic estimate (we queried receptacle-related incidents concerning children ages 1 month to 10 years old). We then applied this ratio to our analysis. The intent is not to provide exact values but to attribute weight to major topics (age, type of injury, objects used...). These estimates have been calculated to identify the major issues associated with children tampering with electrical receptacles.

Analysis of the NEISS information shows that at least 71 percent of all incidents occur at home, making dwelling units the prime location for receptacle-related pediatric electric burns. The vast majority of injured children are under age 6. Victims age 2 and under represent 39 percent of cases, while those ages 3 to 6 represent 50 percent of all cases.

The incidents occurred as the result of the child inserting an object into a receptacle. The following is a breakdown of the percent of incidents in which a child inserted a specific type of object into a receptacle:

INSERT TABLE 3280HUD_L72 HERE

Many of these objects are not perceived as dangerous by parents, perhaps explaining young children's easy access to them and frequent rate of insertion.

The results of these incidents are very rarely fatal, but will result in electric shocks and mild to sever burns. Most incidents are relatively superficial first or second-degree burns, where children are treated for reddened skin or blisters

Hairpin	32 percent
Key	17 percent
Wire	7 percent
plug and cord	11 percent
pin/needle/screw/nail	5 percent
paper clip/staple	5 percent
Tweezers/file/tool/knife	3 percent
jewelry/belt buckle	1 percent
body part (finger)	12 percent
open outlet	1 percent
Unknown	6 percent

and released from the Emergency Room with topical treatment. Yet 8.7 percent - that is over 200 children per year - need to be hospitalized. 2 percent of all burns are 3rd degree. These are burns so severe that they result in deeply charred skin and can require a skin graft if the burn is over 1 in. in size. Children are more susceptible to electric burns due to their tender skin and the frequent presence of liquid (saliva, juice, milk). These burns can leave permanent, visible scars.

It is important to note that the NEISS report also includes the following four fatalities:

1991 - 2 year old male, Shawnee, OK, child place key in electrical receptacle

1994 - 23 month old male, Traverse City, MI, child stuck keys in electrical receptacle

1995 - 3 year old female, Great Falls, MT, contact with electric receptacle, cardio respiratory arrest

1998 - 2 year old female, Springfield, MO, stuck unknown object into 110V receptacle

In addition to the 1991-2001 reports, the 2002 National Electronic Injury Surveillance System (NEISS) report is included. The 2002 report states that there were 129 reported incidents, which indicates that there were an estimated total of 3, 277 incidents in 2002 alone. The 2002 data covers all electrical outlet and receptacle incidents occurring in dwellings. The 2002 data contains more detailed information than the NEISS reports for previous years and may be used to provide a better understanding of the reported incidents.

A study conducted by Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) reported similar data. For example: almost 80 percent of the Canadian incidents occurred in the home (compared with 71 percent in the US). 40 percent were 3-6 years of age (compared with 50 percent in the US). A recent presentation of the CHIRPP data concludes that "legislated standards for the manufacture and use of child safe outlets along with education for parents and children" was called for. I have included CHIRPP raw data for electrical injuries to children ages 9 or less for 1996 - 2003.

Preventative Measures:

Parents, teachers, baby-sitters, grandparents and other caregivers are usually well aware of the dangers related to electricity and to receptacles in particular. Children are often taught to stay away from electric appliances and devices. Public health organizations such as hospitals, maternity wards and the CPSC provide adults with warnings and advice to "child-proof" their homes. There are several preventative measures available.

One option is to provide children with 24/7 permanent surveillance. No research is required to understand that this is an impossible request for the vast majority of parents or caregivers managing multiple children and tasks at any time.

Another commonly used solution is the "plastic receptacle cap". This small cap usually has 2 plastic blades that insert into the receptacle openings and block access to the live electrical contacts. Yet these caps can be poor protective systems. In 1997, the Biokinetics Lab at Temple University in Philadelphia studied 4 different receptacle caps. They tested these caps with 47 children ages 2 to 4 years old. One type of cap was removed by 100 percent of the 2 year-olds in less than 10 seconds. Other caps were removed in less than a minute by most other children.

Since that test, UL has provided this industry with strict product guidelines, but this does not deal with existing older caps, and some caps still remain un-listed. Also caps can only provide protection when they are inserted. When they have been removed to plug in an appliance there is no longer any protection. When a child pulls out a lamp cord there is no longer any protection. Receptacle caps provide protection only when they are in place. Unfortunately, this can only be ensured by constant vigilance to be certain that the cap has not been removed.

There are also receptacle cover plates available in the market that are intended to provide increased protection for children. However, there is no standardized test program to evaluate these plates for tamper resistance and they are typically not UL listed as they can unintentionally introduce a hazard by restricting the full insertion of a plug. These "child proof" plates must also be considered a temporary solution, as it is common practice for homeowners to swap out cover plates for more decorative models from the huge selection at the local hardware store.

Some may believe AFCIs and GFCIs are effective in preventing incidents such as those described above. First, AFCIs are not intended to protect against such incidents. They are intended to prevent arcing-initiated fires, not burns to the finger. While GFCIs can provide some level of protection, they are only required on a limited number of circuits and only protect against some of the circumstances associated with such incidents.

Listed tamper-resistant receptacles provide the most effective means of preventing children from inserting foreign objects into receptacles. Tamper-resistant receptacles have the advantage of being passive protective devices. Once the tamper-resistant receptacle is installed, a plug may be inserted and withdrawn for normal everyday operation, and the tamper resistant feature of the receptacle remains unaffected. The tamper-resistant receptacle continuously provides protection without any user intervention. Decorative cover plates can be installed without affecting the protection. Tamper-resistant receptacles have been used in hospitals for many years. Section 517.18(C) of the National Electrical Code (NEC) recognizes the hazard of children inserting foreign objects into a receptacle and requires tamper resistance in Pediatric Locations. UL has established rigorous testing and evaluation requirements in UL 498 for

tamper-resistant receptacles to ensure that an object inserted into one of the plug blade openings cannot come into contact with a live part in the receptacle. These requirements take into consideration the capabilities of small children, resulting in a receptacle. These requirements take into consideration the capabilities of small children, resulting in a receptacle that is effectively tamper-resistant to a child. Tamper-resistant receptacles are not necessarily tamper-proof for adults attempting to defeat the tamper-resistant feature. For over 20 years, these products have been used in the pediatric area of hospitals with no report of injuries.

In order to ensure the elderly and individuals with disabilities would not encounter excessive force to insert a plug into a tamper-resistant receptacle, NEMA wiring device manufacturers conducted tests to compare the insertion forces required to insert a plug into a standard receptacle and into a tamper-resistant receptacle. A NEMA 5-15P, 15 amp, 125 volt plug was used. The typical insertion forces observed could be characterized as approximately 1 -1.5 lbf is required to overcome the initial resistance of the tamper-resistant mechanism. This is followed by a drop in force as the plug blades have opened the tamper-resistant mechanism and are passing through. As insertion continues, at the point where the blades reach and become engaged with the receptacle contacts the force increases. This is where the maximum force is observed. The typical insertion force varied from 10 -20 lb, depending on the design of the receptacle. There was no appreciable difference in insertion force between tamper-resistant receptacles and receptacles without the tamper-resistant mechanism. The overriding forces required to engage the receptacle contacts are far greater than the force exerted by the tamper-resistant mechanism.

Consideration has been given to the fact that some homes do not have small children, or that a dwelling owner should be given the choice of whether or not to include tamper-resistant receptacles. While a home may not have small children at a particular point in time, houses are sold, and kids visit grandparents and neighbors. Controlling where children are and are not isn't possible, but providing a safer environment for them is...for about \$50.00 per house.

Tamper-resistant receptacles are permanently installed...and forgotten, while providing the best child safety available.

Tamper-resistant receptacles may not have prevented all the incidents in the NEISS reports but they undoubtedly would have provided a significant reduction in the injuries to children. Since most of the incidents occurred in homes, adopting an NEC requirement for tamper-resistant receptacles in dwelling units where children are likely to come into contact with receptacles will substantially reduce the type of child injuries described in the NEISS reports.

Note: Supporting material is available for review at NFPA Headquarters.

Cost:

NEMA estimates that the cost difference to fit a new home with tamper-resistant receptacles in lieu of standard receptacles is about \$50.00. This estimate includes required GFCI receptacles and outdoor receptacles.

ATTACHMENT N
PROPOSALS
TIE DOWN SYSTEM
LOG #66

3280HUD- Log #66
(3285.403)

Final Action: Reject

Submitter: James P. Lozier, Hurricane Harness Corp.

Recommendation: Add text as follows:

**INTERLOCKING METAL PAN MOBILE HOME ROOF PROTECTION
HURRICANE HARNESS (over-the-roof) Tie-DOWN SYSTEM**

This Proposal is Predicated on the Belief;

Whereas; we have found that the bulk of instances, when interlocking aluminum metal pan roof systems are exposed to extreme high winds, such as a hurricane or the outer band winds of a tornado. un-repairable damage occurs to the overall building structure once the fasteners attaching the metal roof panels to the structural frame begin to tear or rip through the aluminum metal pan base, under the pressure differentials (lift) created by airfoil (vacuum) as a consequence of the high velocity winds passing over the surface plane of the roof. This event becomes compounded by the high velocity of wind entering the carport or other building add-on causing a mode of (wind capture), a formative release of energy forces the underside of the roof panels to lift resulting in complete devastation to the roof system, in addition to the roof line/siding section, where developments may become less than a desirable situation to the overall building structure and to the homeowner.

To mitigate; this negative force of pressure differential, pre-installed aluminum tubular channels are permanently fastened perpendicular across the top of the interlocking ribs of the metal roof system without disturbing the flow of rain water at the eave, mid span, and ridge locations of the building. Variable lengths of an extreme strong, low elongation strap are cut to length, placed over the channels and fastened into ratchets which attach to a variety of anchoring methods on opposite sides of the building. This engineered design provides an uninterrupted continuous load path from one anchor to the other. The ratchets apply a uniform counteractive load throughout the channel systems and throughout the entire roof assembly. The structure literally becomes sandwiched within the strapping and the anchors with addition to providing a positive dead load to the outer wall systems and column supports, increasing the resistance to the lateral wind force being applied to the main structure during a storm event.

Property loss; as a result of Hurricane Andrew on August 24, 1992, and most recently, Hurricane Charlie on August 13, 2004, demonstrated the vulnerability to manufactured homes in high wind zones. Thus, to prevent future storms ending in similar fashion, the (FMHCSS), should consider this secondary measure of protection which once applied, will visually alleviate any unforeseen building deficiencies within the structural confines of the building.

The Hurricane Harness (over-the-roof) Tie-Down System; provides protection to mobile homes. In collaboration with the late Honorable Dr. Herbert Saffir, co-writer to the Saffir-Simpson scale; found that in the bulk of instances, when a category 2 hurricane strikes land, winds (96-110), the safety and security of a mobile home becomes greatly jeopardized. His analysis of this safety devise, led us to the development of our strong, low elongation strap design. Through compliance with the (NFPA), we will greatly reduce he risk of property loss caused by hurricanes and reduce the overwhelming financial burdens placed upon our State and Federal governments post storm recovery efforts following the aftermath, from future hurricane disasters.

Substantiation: Hurricane Resistant Mobile Home with Add-On, Over-the Roof Structure Tie-Down System.

Note: Supporting material is available for review at NFPA Headquarters.

Committee Meeting Action: Reject

Committee Statement: The proposal did not include any specific language for use of the tie down system. The MHCC did not know how to develop language that would be appropriate for inclusion in CFR Title 24, Part 3280. Part 3280.403 deals with windows thus this would not appear to be the proper location for any such system to be considered. A description of the system leads the MHCC to believe that this might be more of an anchoring system thus perhaps it would fit better as a requirement of Title 24, Part 3285—Model Manufactured Home Installation Standards.

In addition to the concerns noted above and perhaps most important, the system that is described appears to be of a proprietary nature. If the submitted system was accepted, this could result in having a requirement in the standard that might only be capable of being designed and installed by a sole source. This is generally a circumstance that standards of any sort should avoid at all cost.

Number Eligible to Vote: 19

Ballot Results: Affirmative: 19